THE DEAF AND DUMB

W. R. SCOTT

THE

DEAF AND DUMB:

THEIR

POSITION IN SOCIETY, AND THE PRINCIPLES OF THEIR EDUCATION, CONSIDERED.

BY

W. R. SCOTT, PH. D.,

PRINCIPAL OF THE WEST OF ENGLAND INSTITUTION FOR THE EDUCATION OF THE DEAF AND DUMB.

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TO

THE MEMORY

OF THE

ABBÉ DE L'ÉPÉE,

THE ILLUSTRIOUS FRENCHMAN,

WHOSE

BENEVOLENT ZEAL

AND

DISTINGUISHED TALENT

FIRST SECURED

TO THE

DEAF AND DUMB

THE

ADVANTAGES OF EDUCATION,

THIS WORK

IS

INSCRIBED.

PREFACE.

A VARIETY of circumstances has induced the writer of the following pages to believe that the Public, generally, are far from being aware of the extent to which Deafness prevails, or of the effects which it produces upon the moral and intellectual characters of those who are its victims. The desire of making the condition of the Deaf and Dumb more fully known, and the necessity of their instruction better understood, has prompted him to the publication of the following pages, under the conviction that a people who contribute their thousands annually to enlighten the heathen ignorance of other nations would never permit similar ignorance to remain amongst themselves, without the attempt to enlighten it, were they but acquainted with its existence. In this country the education of the Deaf and Dumb de-

pends entirely upon the efforts of benevolence. It becomes, therefore, a duty incumbent upon those who are aware of the deprivations which they suffer to make their condition known — "to plead for those who cannot plead for themselves." If the following pages be successful in extending the knowledge of their misfortune, and exciting a more general sympathy in their behalf, the objects of the writer will have been accomplished.

A brief sketch of the means employed in their instruction has been given. This was adopted for several reasons. In the first place, because such a plan afforded a convenient opportunity to point out some of the peculiar disabilities attached to the condition of the Deaf and Dumb. In the next place, it tended to shew more clearly that their education demands a special method of instruction, and that such persons only as have made that method their peculiar study can be entrusted with their education with a prospect of success. And, thirdly, it will enable those persons who are connected with Deaf-mutes to judge more correctly what children, so situated, have to contend against in their acquirement of knowledge,

and hence to see how necessary it is that the time devoted to their education should not be unduly abridged. The writer would mention that on the subject of Articulation the views here maintained differ from those held by some eminent teachers, especially those of Germany. Against these authorities, however, might be quoted those of others not less celebrated. Indeed, it will be seen that the chief arguments here advanced upon this subject are taken from a distinguished American authority. So fully did these agree, in every respect, with the views held by the writer, that he did not hesitate to use them in preference to any observations of his own. He has also to acknowledge using a similar freedom with the same authority on one or two other points, and has not particularized these as quotations only, because they were not made sufficiently literal.

A few remarks are added on the causes of Deafness, and some practical hints for the early management of Deaf and Dumb Children, which, it is hoped, will be found useful to those persons whose circumstances may require such information.

"Plead for the Dumb — we cannot plead!
The Blind may pour the faultering prayer,
And sorrow may recount the deed
That made her want and misery's heir.
But our sad fate is mute despair,
Unless all-gracious heaven above
Makes *us* the objects of your care,
And *you* the heralds of its love!"

ERRATA.

Page 23, line 2 from bottom, *for* ceteris, *read* cæteris.

30, last line, *for* Dialectice, *read* Dialecticæ.

51, Note, *for* Cordan, *read* Cardan.

56, Note, *add* of, *after* Locke.

59, line 17 from bottom, *dele* them.

62, line 13, *add* to, *before* excite.

68, *for* Quettellet, *read* Quetelet.

75, line 3 from bottom, *for* for, *read* of.

88, line 6 from bottom, *for* word which has, *read* words which have.

105 line 13, *for* Gronigen, *read* Gröeningen.

AN ESSAY

ON

THE DEAF AND DUMB,

&c. &c.

THE great distinguishing feature of mankind is language. Deprived of the power of communicating and recording his ideas, and of receiving the ideas of others, man never could have advanced beyond the narrow boundaries of his own limited experience. That experience also must have remained crude and unsatisfactory, for it never could have been corrected by the purifying process, of passing through the minds of others. Without the means of communicating his thoughts, man must have roamed over the earth a solitary savage, with no power to develop those instincts of his nature, which prompt him to become the being of social and civilized life. There might have existed in his soul the fountains of love, joy, and hope, but he never could have mingled these feel-

ings with those of his race; he might have possessed a soul capable of admiring the beauties of Nature, but he never could have sympathised in such emotions with others. His feelings must all have remained isolated within himself, never advancing beyond their original prison-house. How infinitely great, then, are the benefits which the power of communicating his ideas confers on man: all his mighty gifts of intellect would have been but a painful burden on his existence, had not Language, or the means of communion with his fellow creatures, been the crowning gift of his benevolent Creator.

There are few surer tests of the extent to which a people may have become civilized, than that of the power and accuracy of their language; and there is no more prominent accompaniment of barbarism than a feebleness and poverty of expression. As a people extend their acquaintance into the mysteries of nature, new forms of speech are required; and as the operations of thought become more refined and more subtle, it follows, as a necessary consequence, that their expressions of thought partake of a similar accuracy and precision.

"To be without language," remarks Dr. Brown, "spoken or written, is almost to be without thought.—We must not think, in a speculative comparison of this sort, of mere savage life; for the rudest savages would be as much superior to a race of beings without speech, as the most civilized nations at this moment are, compared with the half brutal wanderers of

forests and deserts, whose ferocious ignorance seems to know little more than how to destroy and be destroyed.

"In our social intercourse language constitutes the chief delight — giving happiness to hours, the wearying heaviness of which must otherwise have rendered existence an insupportable burden. In its more important character, as fixed in the imperishable records which are transmitted in uninterrupted progression from that generation which passes away to the generation which succeeds, it gives to the individual man the product of all the creative energies of mankind; extending even to the humblest intellect, which can still mix itself with the illustrious dead, that privilege which has been poetically allotted to the immortality of genius, of being "the citizen of every country and the contemporary of every age."

It is only when the full advantages of accurate language are understood, that we are fully prepared to comprehend the calamity of its absence. No race of people probably, exists where such a power is not developed.

But amongst the various diseases to which mankind are subject, there is found one, which places its unhappy victims in the condition we have contemplated. It is that of Deafness from birth. With the advancement of scientific knowledge, diseases have generally been found, under divine favour, to give way more and more before the skill and assiduity of the physician; but in the case of Deafness little has been done.* Nor is this disease so uncommon as is generally sup-

* See Note A.

posed, since statistical details give its average throughout Europe to be about one in sixteen hundred.* Even amidst the society of civilization this unhappy class of sufferers remains "alone in the world of thought." Dr. Johnson denominates this disease as "the most desperate of human calamities;" but yet, desperate as it appears, it has attracted comparatively little of the attention either of the philanthropist or the philosopher. This may arise from many causes, one of which, doubtless, is, that deafness does not obtrude itself upon our notice, like various other forms of disease. There is nothing in it that shocks our sight, or immediately appeals to our observation. When a Deaf-mute presents himself before us there is nothing to invite particular attention, and he passes unnoticed amid the crowds that surround us. How different is it with the Blind; his affliction is often painfully prominent, and even should that escape our notice, he still possesses the power of arresting our attention by his voice. This is not the case with the Deaf and Dumb; he neither attracts our notice by his misfortune, nor can he excite our pity by his tale of woe--his is a voiceless misery that passes generally unheeded, because unknown. But even when the existence of this calamity has been known, its nature has frequently been misunderstood, and the position of the Deaf-mute in society consequently falsely esti-

* "The number of the Deaf-mutes in Europe is 140,000. It is of great importance that the case of so large a class of society should be completely understood."—*Miss Martineau.*

mated. Some have ranked him amongst the idiotic and insane, others have considered him endowed with supernatural powers; and as he presents no *apparent* distinctions to ordinary persons, many now imagine that no peculiarities are attached to his condition. From all these opinions he has suffered an additional burden of sorrow to that already allotted to him by nature. Even in the present day we have often seen persons desirous of investing him with a mysterious agency, and anxious to behold in him something more than natural powers; and so strong is the prejudice of ignorance, that they are in general not willing to be undeceived.

Dumbness sometimes arises from other causes than that of Deafness: it may arise from an imperfect formation of the organs of the voice; and children who are so imbecile from mental weakness, as to be unable to acquire a knowledge of articulate sound, will remain Dumb; but this Dumbness must be carefully discriminated from that produced by Deafness. Moreover, the idiotic-mute has no thoughts to communicate, but the deaf-mute may have thoughts, but wants the means of communicating them. A deaf-mute is dumb only because he cannot hear sound, and therefore cannot be expected to use that, of which he can form no conception. Those, again, who are dumb from imperfect organs of the voice, may perfectly understand the language they hear spoken, though themselves unable to use it. This kind of dumbness must also be distinguished from that occasioned by Deaf-

ness, as its effects upon the sufferer are by no means of the same character with those perceived in the Deaf-mute. That class, then, only of the Dumb who are also Deaf, and which have been termed with significance *Deaf-Mutes*, it is our object to contemplate. The others are not of that interesting character, nor do they form so peculiar a class as the Deaf and Dumb. Those who have given but a limited attention to mental philosophy will easily perceive that the Deaf and Dumb form *no distinct class in their natural intellectual constitution;* that the difference which they present is wholly produced by their want of social intercourse; and however after a time, this deprivation may prevent the formation and development of their character, still by nature they are endowed with feelings, sentiments, and passions, common to the rest of mankind. They are gratified with attention and applause, and they resent injuries equally with others, and exhibit amongst themselves the same varieties of disposition and intellect that mark the characters of the more fortunate of their species. The difference between them and others is solely that of their peculiar position — their state of isolation in society. In what condition, then, does this loneliness of their situation leave them; what are the effects produced by man's social intercourse with his fellows, — how much do we owe to society? The celebrated French physiologist, Andral, in the "*Dictionnaire de Medecine,*" describes the condition of the Deaf-mute as follows: "We find him," says he, "remain habi-

tually in a sort of half childishness, and he has great credulity. To balance this, he is, like the savage, exempt from many of the prejudices which we owe to our social education. In him the tender sentiments are not very deep; he appears not to be susceptible of lasting attachments or lively gratitude — pity touches him but feebly; he is an entire stranger to emulation; he has few enjoyments and few desires; and the impressions of sadness but slightly affect him." Mr. Baker* remarks on this subject, "that experience and observation would have induced this accomplished pathologist to have bestowed on them a more liberal endowment." He also observes, "at the same time, it must be acknowledged, that the Deaf and Dumb are generally inferior in their moral and intellectual powers to those who do not labour under the same defects." From what we have before remarked, it will be seen that we do not suppose that by *natural constitution* they are endowed with an inferior intellectual and moral nature, but that the inferiority is solely the result of their position. Amongst them will be found all the variety of intellectual and moral character which is presented by others. The difference, therefore, which they may be found to possess as regards *degree* in their moral and intellectual nature, must find its cause in the absence of that anxious training which parental affection,—when communication is

* Article "*Deaf and Dumb*," in the Penny Cyclopædia, by C. Baker, Esq. Head Master of the Yorkshire Institution for the Deaf and Dumb.

complete between parent and child,—will instinctively provide. But, shut out from intercourse with his friends, as a Deaf and Dumb child is, no moral truths enter his mind; he sees in the world around him no government or order; he is not taught to recognise there, the guiding hand of an all-wise Providence, and he remains without God in the world, a stranger to every sentiment that ennobles, and to every hope that elevates man above the transitory things of time. What, then, does man not owe to society. It is to him what sun and air are to plants — it is the atmosphere adapted for the development of his nature, and, deprived of its influence, he grows up without unfolding one embryo blossom of his spirituality. Those of mankind who are endowed with hearing and speech, from their constant intercourse with society, educate themselves, and long before they have arrived at mature age, they will have acquired an extensive acquaintance with many of the most useful facts of nature. Take, as an example of the value of early acquirements, the instance of language; how perfectly and how extensively do even children become acquainted with it; not, certainly, with its principles, but with what is of far more importance, its practice. Few, indeed, estimate properly the value of this early acquirement, and it is only when it has to be taught by a kind of artificial means, as is the case with the Deaf and Dumb, that it can be fully appreciated. Then, again, if we can estimate the amount of useful knowledge — the historical facts — the moral truths,

&c., which we have received in the conversation of social life, we shall approximate to an estimamation of what our education owes to our being one of an intelligent community. It is only by such an examination, that the true position of the Deaf and Dumb is ascertained. And what, we ask, is that position? Are they placed in a condition to educate themselves, like the rest of mankind? Do they acquire that key to all knowledge, language, and thereby enter into communion with the wise of all ages, past and present? No! They are alone in the world of thought, and remain ignorant even in the midst of knowledge.* Their mental and moral nature is imprisoned; a barrier separates them from those regions which science enlightens, happiness vivifies, and which virtue consecrates. Of all calamities this is truly the most desperate. Sociality is the highest blessing bestowed on man, for it is only through its portals that he can become acquainted with himself, or learn the will of his Creator; and of this greatest and most important of blessings the Deaf and Dumb are deprived.

The comparative condition of the Deaf and Dumb and the Blind has often formed a subject of consideration. A glance at it here may assist us in putting the situation of the Deaf and Dumb more clearly

"We can never be sufficiently grateful to Almighty God for *Speech;* that divine scheme for the conveyance of sentiment and the establishment of general intercourse — the parent, or the friend of all that adorns, and of all that delights, the soul of man."-*Aristarchus.*

before our readers, not only in respect to the Blind, but also as respects society; and may also assist to shew what is the peculiar assistance which their respective conditions demand of society. In an estimation of our knowledge it is extremely difficult to assign to our separate faculties the true amount furnished by each. Our nature has so much of unity in it, that the derangement of one power materially interferes with the manifestations of others. It becomes difficult to say, therefore, what may be the true condition of either the Deaf and Dumb or the Blind. We know that in the formation of our notions of simple objects, more than one sense is usually employed, and that our senses have a reciprocal influence on each other in the formation of such perceptions. To reason, therefore, upon the functions of any one sense from what we consider in ourselves its appropriate action, may, perhaps, be as false as our chemical reasoning would be, were we to attempt to infer the properties of an uncombined acid or alkali from an observation of the very different properties of a neutral salt, into the composition of which we know that the acid or the alkali has entered. So our reasoning upon the effects of Deafness or Blindness, from what we believe in ourselves to be the functions of hearing and sight, may be very liable to error. Yet an examination of what we owe to the senses will assist us to estimate, in a great measure, the position in which persons are placed, who are deprived of any of the five.

It is now pretty generally admitted that the mind

possesses no innate ideas. It has faculties capable of acting upon external nature, when brought into connexion with it, but they cannot develop themselves without the means exist for their being linked with objects beyond them. The mind may be compared to the eye, which when perfectly formed, is capable of being excited by light, of receiving its impressions, and transmitting them to the brain; but though the eye be ever so perfectly formed, if light be shut out from it, it is unable to go on with its functions. The mind, if deprived of the external world, would remain, like the eye, in darkness. Man, then, possesses powers for receiving and operating upon external impressions, but he does not possess intuitive knowledge. An erroneous view in this respect of the true mental condition of man frequently leads to grievous errors in education. Miss Martineau, in her "*Society in America,*" speaking of such errors, and after remarking on the physical and moral evil produced in the subjects of such mistaken education, adds also, "This fundamental principle is working mischief in other directions. It affects, very unfortunately, the welfare of the Blind, and yet more, the Deaf and Dumb, who are taken under the benevolent protection of society. As long as there are many of the most distinguished members of the community who hold that the interior being of these sufferers is in a perfect state, only the means of manifestation being deficient—that their training is to proceed on the supposition of their being possessed of a complete set

of intellectual and moral intuitions—and that they therefore only need to be furnished with types, being already full of the things typified—and even that they have the advantage over others, in the exclusion of false and vulgar associations — the pupils will have little chance of benefit beyond the protection and comfort secured to them in their appropriate institutions. In the conversation of those who verbally pitied their case, I could frequently trace an inward persuasion that the Deaf and Dumb were better off than those who could hear and speak ; and there were few who discovered, while admiring the supposed allegorical discourse, or compositions of the pupils, that the whole was little more than a set of images, absolutely empty of the abstract truth which they were supposed to involve. *I have witnessed this tremendous error in teaching the Deaf and Dumb elsewhere.**" This error is not confined to America, but may be met with in our own country. It is a mistake that can only arise from an ignorance of all facts connected with the mental constitution. The Deaf and Dumb, we have heard remarked, (by those who thought themselves perfectly competent to judge,) have, to compensate for their loss of hearing and speech, a " powerful imagination, which more than supplies to them the loss they sustain in the deprivation of a sense." We have before remarked that they do not form any distinct class as far as natural mental endowments are concerned, and therefore in this faculty they are precisely

* "Society in America," by Harriet Martineau, vol. iii. page 176 et seq.

as others; but let us for a moment consider what is the true function of this faculty, which is in them supposed to *compensate* for their loss of hearing and speech. Imagination here is supposed to be a power able of itself to *create*, not by forming *new groups* out of *old materials*, furnished by sensation, but totally independent of all knowledge obtained by means of the senses; that it can of itself and by itself originate *proprio vigore*, something altogether different from, and independent of, acquired perceptions. Nothing can be further from the truth. Let us consider the nature of memory; no one ever mistakes the legitimate operations of this faculty, yet imagination is very nearly allied to it as a mental act. Memory is the power which the mind has of retaining and reproducing ideas, formed by the intellectual powers, attended by the consciousness of their former existence, and following the order of events as they were produced in nature. But memory could have no place as a mental power, if there did not exist facts in the mind on which it could be exercised. We have remarked that imagination partakes in some respects of the character of memory; that is to say, it reproduces impressions like the memory, but in their reproduction it differs from memory, in producing them without regard to the order or the time in which they previously existed, and indeed without regard to their past existence at all. Imagination, then, enables us to form new and ideal groups, but these are all formed out of the materials gathered in the first

instance from sensation. The painter, when he produces the finest specimen of his poetic imagination, has still in the first instance been indebted to his senses for a knowledge of those beautiful varieties of form and effects of colouring, which compose his picture; and though to his taste and genius belong the creative power of adapting them to the particular combination which they now exhibit, still it is the arrangement alone that is new. An artist with ever so much genius, had he neglected to study form and colour, could never produce a great imaginative work. Imagination, therefore, deprived of the assistance of the senses, never could manifest itself; and this power, in the Deaf-mute partakes of the same depression which is suffered by his other powers, in consequence of the state of isolation, to which he is doomed.

The mind to receive knowledge must be brought into communion with the external world; and this can only be accomplished by means of the senses.* These are separate and distinct from mind, yet so dependent is it upon their presence, that if they are absent its powers must remain undeveloped for the mind is incapable of originating any subject of thought *sua sponte* but operates upon materials furnished by the senses. Even in dreams where the

"In these [sensations] we find the elements of all our knowledge, the material on which the mind is ever operating, and without which it seems to us almost impossible to conceive it ever could have operated at all, or could even, in its absolute uncertainty, have been conscious of its own inert existence."—*Dr. Brown's Lectures on the Philosophy of the Human Mind.*

vagaries of the mind appear farthest from anything like sensible impressions; still, a careful analysis of these strange and often ludicrous wanderings, will shew, that the fundamental idea is always caught from sensation.

As in the case of the material world man can mould its plastic character into a thousand forms—can combine, compound, and sever its parts, so in the world of thought, he may variously arrange and transform his impressions, but in it also he has no creative power.*

So much, indeed, of human knowledge, and of all that is delightful in human feeling, involves these elementary sensations, as it were, in the very essence of the thoughts themselves, that some of the most acute and subtle reasoners have maintained, that the whole variety of consciousness is sensation merely transformed. † But though various facts disprove this simplicity of arrangement of the mental phenomena, still it is not the less certain that the variety of our consciousness, when carefully traced, may be shown to be the result of sensation in some of its several forms.

In the case then both of the Deaf and the Blind, there must be a considerable difference in their mental acquirements, compared with those whose senses are complete. An absence of a number of sensations which the perfect senses would have supplied. It would seem a truth almost axiomatic, that (*ceteris paribus*,) in the same ratio in which we are denied the use of

* Locke. † Condillac.

our senses will be the absence of intelligence; and, in consequence, the Deaf-mute and the Blind, from their respective positions, if allowed to remain without the application of some artificial means for supplying them with instruction, must always be inferior in their condition to those who possess their senses perfect. It seems almost unnecessary to argue this point, yet such are the mistaken notions which are not unfrequently met with upon it, that it becomes necessary for us to do so.

From the the peculiar situation in which the Deaf and the Blind are placed, instruction cannot proceed in the same manner, as in the case of those who are more favourably endowed. It is therefore required of their instructor, to invent some special method by which their education can be accomplished.

In the case of Deafness, its first visible effect is to take away language. This is unquestionably the greatest deprivation which arises to a deaf person; and if he remains uneducated, his loss must be estimated by a consideration of all the advantages which flow from the use of language, and to consider him deprived of all these.

This loss, though the greatest, is not however, the only one; the enjoyments produced by music are entirely shut out from him, nor does it appear that by any analagous sensations can he be made to participate in the delightful emotions which musical expression produces. The Deaf and Dumb may be made to comprehend, that the ear is cognizant of a variety in sound,

as the eye is cognizant of a variety in colour, and that the ear may be pleased or offended from such sensations; as the fact is with the eye from colours, the taste from flavours, or the smell from odours; but the feelings which music awakens in the mind, that magic power of music described by Dryden, which—

"Raised a mortal to the skies,"
"And drew an angel down,"

can never be understood or experienced by the Deaf and Dumb.

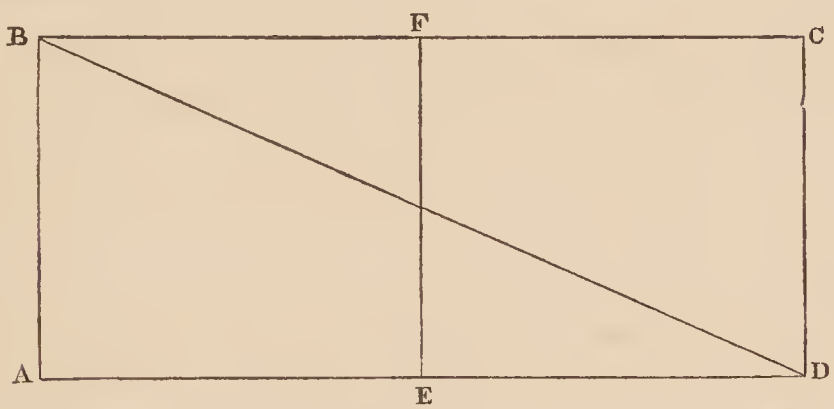
It is very difficult to say how much of knowledge may not be acquired by a person born blind. A very profound writer maintains with considerable appearance of truth, that "Sight discovers almost nothing which the blind may not comprehend."* It is a fact frequently remarked, that blind persons distinguish themselves in mathematics—the science of form—and that they have shown a perfect knowledge of the powers both of the microscope and telescope, and have also been conversant with the laws of optics; and these are branches of knowledge the phenomena of which are generally believed to be closely connected with sight. They seem also to have upon such subjects, clear and precise arrangements of thought, nor do they appear to have any difficulty in following any discourse where reference is made to such subjects. This could hardly be the case if their ideas were not clear and definite. Such qualities as form, magnitude, extension, &c., they might be supposed to acquire through the sense of touch; but the idea of

* Dr. Reid.

colour would appear to be difficult if not impossible for them to conceive. That they may form notions of this quality has been, however, often maintained and that they can form certain analogical ideas of its nature is very probable, by a similar process to which we have shewn the Deaf and Dumb may arrive at the idea of music. But they can never feel the pleasure which results from a contemplation of objects arranged according to the laws of harmonious colouring. So while the Deaf and Dumb are denied the pleasures derived from the perception of the harmonies of sound, the Blind are denied the enjoyment to be derived from harmony of colour. That the Blind speak often feelingly of the exciting effects of soft and pleasing colours, as well as forms, may be seen in the poetry of many Blind persons, who frequently speak of the "blooming cheek" and "clustering ringlet," and "eyes of blue with jetty fringe," but it is probable that this language in them has force in association rather than from any literal meaning which it possesses.

The possession of the sense of hearing, however, enables the Blind to become acquainted with the use of speech, like other persons, and consequently, places them in a position, that, under any circumstances, where they have persons to communicate with, they can cultivate their minds. They have not, like the Deaf-mute, to wait until they acquire a means of communication by a special mode of instruction. They obtain it like ordinary people, and thus, though they never leave their home, they are never entirely

deprived of instruction. But the Deaf-mute, if left under such circumstances, languishes for want of intellectual culture. M. Piroux, the eminent Professor of the Institution for the Deaf and Dumb at Nancy, has illustrated, by a very ingenious diagram, the comparative condition of the Deaf-mute and the Blind.* He thinks, "From first appearances we are apt to suppose the situation of the Blind more deplorable than that of the Deaf; but to estimate justly we must not be led away by external appearances. The Blind requires a conductor to guide him, the Deaf-mute requires a guardian, that his person and property may be protected according to law. The first does not see the light of day, but the second does not see the light of Truth." With the following diagram he illustrates their condition.



He supposes the normal state of man to be represented by the rectangle A. B. C. D. He divides this into two equal parts by the line F. E. The rectangle E. D. C. F. representing the physical part, and the rectangle A. E. F. B. representing the moral part, of man. Then from B. he draws the line B. D., and the triangle B. D. C. represents the condition

* L 'Ami des Sourds-muets, par M. Piroux.

of the Deaf-mute, and the triangle A. B. D. represents the situation of the Blind.

Here it will be seen, that while their deprivations in extent are considered to be equal, the *nature* of these are very different. In the triangle representing the Deaf and Dumb, the physical part is exhibited as superior to that in the triangle representing the Blind; and the moral part of the Deaf and Dumb as much inferior to that of the Blind.

The advantages which the Deaf and Dumb have over the Blind in their physical part, are regained to the Blind in their moral part; and on the other hand what the Deaf-mute loses in his moral power, he gains in his physical power. Thus while their losses in relation to the normal state of man, may be deemed as equal as far as extent is considered, namely, one sense, the effects produced respectively are entirely different; the one confining and limiting the mental, and the other the physical powers, with which man is endowed.

Thus, in the case of the Deaf-mute, we have seen that his situation is one of isolation; he is shut out from intercourse with his fellow-men, and consequently cannot become acquainted with the knowledge which exists in society. How melancholy must be the lot of such a human being; he cannot obtain the slightest knowledge of the duties he owes to a Creator, his state of sinfulness as a fallen being, or his privileges as an object of a Saviour's love—all these *highest*, and most *human*, of feelings and aspirations are entirely denied him. To him has never come the glad tidings of salvation, even though a

dweller in the midst of Christianity. More cannot be said than this to shew the misery of his condition or the extent of his calamity. The Blind, from his position, suffers deprivations of physical enjoyments; he cannot see the variety exhibited by the delightful changes of external Nature, and the pleasing pictures presented in these extended scenes, which at one glance the eye can survey. But by the means of *language*, he can hear all the beauties of Nature described, and can to some extent experience the emotions which their beauties excite in us. The Blind have the enjoyments—blessings almost indescribable—which flow from the familiar and endearing conversations of domestic life, and they possess the means of religious communion. All the momentous truths which revelation teaches they can become acquainted with through the ordinary means of religious worship—the ministry of the church. They are not therefore so dependant on the contingencies of eleemosynary aid as the Deaf and Dumb. The fact that many Blind men have risen to the highest eminence, both in literature and science, supports strongly the belief, that the impediments to the progress of the Deaf and Dumb are of a far more insuperable character than those presented to the Blind; since it has been remarked that no Deaf-mute has ever been distinguished amongst the great in literature or science in any age or country. A recent writer on the Deaf and Dumb attributes this to their want of ambition; but granting this feeling to be one of the elements of greatness, it is certainly not the

only one, otherwise we should have as many philosophers as pedants. The true reason is more probably to be found in the difficulties they have to surmount before they can enter fully into communication with the accumulated stores of intellectual experience.

The Deaf and Dumb do not remain in this state of isolation without making efforts to procure for themselves an intercourse with the world—and to some extent they succeed. Unable to address the ear, they have recourse to the eye of their fellows, and by a species of communication,—*gesticulation*—still open to them, they find that some of their wants and feelings can be made known. It is upon this fact that the hope of restoring the Deaf and Dumb to society rests. Here is found a starting point common to Teacher and Pupil, and on the power of developing and perfecting this intercourse the intellectual and moral freedom of the Deaf and Dumb depends. In the annals of Roman History we learn that the power of Gesticulation, or Pantomime, was carried amongst that people to great perfection; but it remained for the holier influences of a Christian age to apply so useful an art to the amelioration of a painful affliction: and that which was only consecrated by the ancients to mere frivolous pleasures, has become with us an instrument of blessing. About the fifteenth century we learn that an attempt was made to instruct the Deaf and Dumb; this is related in a posthumous work of Rodolphus Agricola, "*De Inventione Dialectice.*" It is said by the author that he

had himself seen a person, born deaf, capable of understanding written language. This account was disbelieved by some later writers, but they have not stated sufficient reasons to justify their disbelief. In the sixteenth century, however, there was no doubt left upon the practicability of such a scheme. A learned Benedictine Monk, Pedro Ponce, taught with success some Deaf and Dumb persons; he left no record of his plans, but the fact of his success is related by two of his contemporaries. Father Ponce died in the year 1584, and in the register of his death it is recorded, that "he was distinguished by his eminent virtues, and that he obtained a just celebrity throughout the world in instructing Deaf-mutes." The first work published upon the art was by John Paul Bonet, a Spaniard; it appeared in the year 1620, and we learn from its contents, that he considered himself the inventor of the art. Whether or not any traditionary knowledge was preserved of Ponce's method it would be difficult to say. It is, however, by no means improbable, that after a lapse of forty years, many persons must have remained who had heard of or seen Ponce's success, and amongst them might have been Bonet. Soon after this period we find various persons engaged with experiments on the Deaf and Dumb, and they have generally left records of their proceedings. Amongst these so employed in England, one of the most successful was Dr. Wallis, professor of mathematics at Oxford. He exhibited in 1662 a deaf and

dumb pupil before the Royal Society of London, and in 1698 he published a paper on the plan which he followed in his instruction. During the eighteenth century there were many similar examples of scientific men undertaking the instruction of one or two pupils ; but it never extended beyond this, and was generally pursued by such persons as were interested in speculating upon the advantages of an universal language.* It remained for the benevolent Abbé de l' Epeé, a French Priest, first to undertake the education of the Deaf-mute on an extended scale, to reduce the mode of instruction to something like a system, and to draw public attention more to the situation and wants of these unfortunate beings.

Having now traced slightly the instruction of the Deaf-mute down to the Abbé de l' Epeé, on whose plan of instruction rests more or less the principles now pursued by all instructors, we shall proceed to a consideration of those principles which ought to regulate the education of the Deaf and Dumb, and endeavour to develope them as clearly as our limits will permit. We have previously mentioned that gestural language is the foundation upon which rests the first intercourse with the Deaf and Dumb. We shall therefore consider the character of this method of communication, and its application as a means of instruction.

The means by which communication is carried on in society, is spoken and written language. It has

* Penny Cyclopedia, article Deaf and Dumb, to which the reader is referred for a more extended account of the rise and progress of the Art of Instruction.

been shown that the Deaf and Dumb do not, like other persons, learn these methods of intercourse, and when left without the peculiar instruction which their situation requires, they are unable to use them. Under such circumstances, they have recourse to a language which is found to exist, independent of all conventional arrangement, and which is principally addressed to the sight. It is that language which assists our first attempts at intercourse with a foreign or strange people, and which is found to be as universal as those feelings which are the distinguishing characteristics of humanity itself. Hence it opens to us a way, through which we can exchange our thoughts with the Deaf and Dumb, and by which these unfortunate sufferers can be brought into the possession of some of those treasures which man owes to his social intercourse. Dr. Reid says, "If mankind had not a natural language, they could never have invented an artificial one. For all artificial language supposes some compact or agreement to affix a certain meaning to certain signs, therefore there must be compacts or agreements before the use of artificial signs, but there can be no compact or agreement without signs, nor without language, and therefore, there must be a natural language before any artificial language can be invented. *"

It is this language,—obliterated almost by the polish of civilized manners—that we fall back upon, to restore from its imprisonment the moral and intellectual nature of the Deaf-mute.

* Inquiry into the Human Mind.

The mind is subject to a variety of feelings, and the effects of these are visible in the features, attitude, or gesture. Every distinct emotion has its appropriate expression, and thus a language altogether independent of words exists, displayed by the countenance or action of man. Every person is aware of the bodily expressions of fear, love, joy, and one can seldom ever mistake or confound the language of these with that of courage, hatred, or sorrow. Such language is immediately and instinctively recognised in every state of civilization, from the American savage to the most refined citizen.* The haughty step, the erect carriage, and disdainful look, are always sure indications of pride; in the timid gait and sidelong look, fear is at once perceived; while agony is always too fearfully pourtrayed, in the distorted looks and agonized features of severe suffering. This language addresses itself to the sight; the Deaf and Dumb therefore are able to avail themselves perfectly of its use, and thus it possesses for them, through life, always a charm which written language appears rarely to acquire. In the application of this language to their instruction, a somewhat wider extension is given to it than in such instances as we have mentioned. It is made to embrace a class of signs, that, though perhaps less natural, still partake of that character, and become of great importance in the mute instruction. Such are the imitations of the forms and actions of animals, and of certain motions and actions of the body, which, though perhaps not strictly natural, still

* See note B.

are easily understood. There are certain modulations of the voice which also are considered a species of natural language; but of this division the Deaf and Dumb can avail themselves but little, since though they may be able to express themselves by such means, still they cannot hear it in others. It is by gesture, therefore, that the uneducated Deaf-mute succeeds in his communication with the world. He sees, for instance one of his companions under the influence of anger—he sees his swollen features—his distorted visage—his convulsed limbs, and in fact he has carefully noted and observed all the violence of action visible in anger. To tell the circumstance of his having witnessed this he would imitate those contortions, and by acting the scene he would rèlate to others what he had himself beheld. This language, though confined in extent, is powerful in effect, and impresses often more forcibly than spoken language, since we know that it is not false. If we are told by a man, with an expression of joy upon his countenance, that he is overwhelmed with sorrow and torment of mind, we do not believe him, because we see that the natural expressions of grief are not upon his countenance, and we believe that his verbial, rather than his gestural, language is counterfeited, and that the latter is mostly a more certain index of feeling than the former.

It is by natural signs that the orator chiefly gives force and energy to his language; and in proportion as his oratory is deficient in the use of these natural signs, it is the less expressive and effective. It

is for the same reason also that reading is less persuasive than speaking; and he who addresses an assembly by reading merely, will have little power over the feelings of his auditory, compared with him who adds to artificial language the energy and force of natural language. Those who have only superficially examined natural language have little conception of its force,* and though not to be compared, in many respects, to written or spoken language, yet it has, when cultivated and developed, considerable power of expression. Phrenologists have often dwelt upon the fact that every mental power has a natural and manifest expression peculiar to itself, and though the idea has met with considerable ridiclue, yet careful observers, whether through the means of Phrenology, or otherwise, will find that such gestural expression has a much wider range than is generally supposed. The power of mimicry, which we frequently find so strongly developed amongst the Deaf and Dumb, depends altogether upon an appreciation of those minute shades of difference seen in natural expression, and which go to produce manner in individuals. There is a general character, as there is a general likeness, which is common to man, and which is discovered by all; but it is he that discrimi-

* "To-day Big Axe came to my tent and sat by me a long time. Never did I so much wish to converse with any man, and tell him about the Saviour; and from the expression of his countenance I thought he felt the same. But the gift of tongues was not imparted to me, and we could only converse by the *language of signs* which can be used far better than I had anticipated."—*A Journey beyond the Rocky Mountains, by the Rev. S. Parker, M.A.*

nates the peculiarities which apply to each, that makes the great artist. Careful to observe all such differences, the Deaf and Dumb catch these peculiarities, and, consequently, are able to reproduce them; whereas, those who are not so careful in observation of natural gesture, lose the minute varieties which belong to the individual in the general features which belong to the mass. Gesture, then, is the way which leads us to the mind of the Deaf and Dumb, and it forms one of the most important means for his instruction. It is not, however, a means that will take the place of his mother tongue. He cannot through it make himself generally understood; and as a language for the improvement and development of his reasoning powers it is incomplete. It has a force and power when addressed to our feelings, but it is far inferior to written or spoken language, when addressed to our reason. Thus it may be said to be the language of poetry, of painting, and of acting, but it fails as a language of argument. It may entice, but it cannot so fully and clearly convince. It is from this cause that natural language is defective as a means of communication. Artificial language, like algebraical symbols, signifies and speaks to the understanding with accuracy and precision, but to the feelings it is comparatively dead: whilst the language of nature has the power of at once rousing, with energy, our passions. This purely arbitrary character of written or spoken language is one of its chief excellencies, as a vehicle, for the reasoning

process; but its defect, as a language of passion and feeling. Thus the man of *science* pushes it to its extreme limits by the adoption of *technicalities*, while the orator and the actor always associate with it the language of nature — *action*.

Natural language has great charms for the Deaf-mute, and it remains always dearer to him than the most polished speech; but unfortunately for him, it cannot be adopted in society, and does not restore him to the world; he must therefore not be contented to rest here, but master the language of his country. This, and this only, will place him in a condition to enter society, and, alas! it is his greatest difficulty. The language of action is very different in its forms from alphabetic language, and this difference operates much against an easy acquirement of the latter mode of expression.

Alphabetic language possesses a certainty and precision in the laws which regulate its combinations that admit of no misapprehension; its entire conventional character, leaves, when properly understood, no doubt on the mind in regard to the ideas it wishes to express; but it is very different with the language of action. From the pictorial form of its signs there often arises a certain degree of doubtfulness between analagous ideas, and from the meagreness of its syntax, the groups which it presents are frequently ambiguous in expression. As long as the Deaf and Dumb remain in that state where their mental operations are directly associated with gesticulate

signs, their use of alphabetical language will remain defective, and their power of expression limited; and not until they are so instructed as to associate ideas directly with written words, will alphabetic language become easy to them, and their mental operations clear and precise.* To attain this end must be the unceasing endeavour of all Instructors; and until they arrive here, their instructions are incomplete. The language of gesture, then, which the necessity of the Deaf and Dumb compels them to adopt in the first instance, must be retained no longer than necessity requires. It unfortunately happens, that the tenacity with which the Deaf-mute clings to the use of signs in his ordinary conversation, prevents those around him from using written language so frequently as its importance demands; and Teachers, though admitting fully the truth of the principle here advanced, find it often difficult to carry it out into practice. Communication by spelling on the fingers is comparatively a long process, and what by this means it would require a dozen words to express, could be communicated by the means of signs with one or two passes of the hand and a single change of countenance.

Another circumstance, which operates often most powerfully against the Deaf-mute's perfect acquirement of language, and over which the Teacher has no control, is the insufficient time allowed by the friends of

* "Without precision of language there can be no precision of idea."—*Withers's Aristarchus.*

the pupil for instruction. Nothing can be more unwise than this ill-judged economy. Every person who has experienced the advantages of education, is well able to estimate how much more is done in one year in the latter stages of instruction, than can be performed in a similar period in its early part. The mind becomes more developed, the powers of perception and judgment become stronger, the know ledge already acquired assists materially in the acquisition of more ; and those subjects which at first were only partially comprehended, become more fully understood and impressed on the mind ; habits of thoughtfulness are promoted, and altogether the mental powers become sharpened and improved. The loss which the Deaf and Dumb suffer by a too early removal from instruction can only be fully estimated by those who know how much they have to learn, and the difficulties with which they have to contend. That these difficulties are rendered greater by the obstacles opposed by ill-judging parents or niggardly guardians, the Teacher finds frequently to be the case ; for until a full and adequate time be allowed for the proper instruction of the Deaf-mute, a Teacher, however talented, persevering, and anxious for his pupils' welfare, will never be able to give them all the advantages which otherwise they might obtain. All that an Instructor can, therefore, do, in many instances, is to direct his pupils which paths to pursue—to lead them through the first difficulties which beset them, and to give them the means, if properly used, of working out for themselves the

completion of their education. We have before observed, that the Deaf and Dumb cling to signs, and prefer them, wherever they can be understood, to alphabetical language. On a pupil's leaving school, especially under the circumstances we have just named, where language has been but imperfectly acquired, he will manifest, when communicating with his friends, the desire of using signs rather than written language. This habit must always be checked, and he should be strictly required, on all occasions, to express himself by alphabetical language, and the errors which he makes should be carefully corrected and pointed out to him. Indeed, while under instruction, in proportion as a knowledge of written language is acquired, so ought the use of signs to be discontinued, for only by such a plan will the habit of thinking in signs be broken up, and the important acquirement of associating thought with written language attained. We have known many children, who have left school with a fair knowledge of written language, lose much of it in the course of three or four years, from not being required to use it; whereas, on the contrary, we have not unfrequently witnessed children considerably improve, who have gone amongst friends, that have followed the plan we have pointed out.

There is another class of signs, employed by the Instructors of the Deaf and Dumb, which are made expressive of certain ideas. These signs have not, however, the same connexion with the

ideas which they are made to represent, as the signs which we have already considered. The one have a relation in nature, the other only by convention. These conventional signs partake more of the character of symbolic language, and only have significancy from preliminary agreement. Such signs originate in the endeavour to make gestural language more precise, and invest it with more of the character of grammatical language. The Abbé de l'Epée carried this auxiliary in his instruction to a great extent, and in his work is found the kind of signs which he employed for the various forms of grammar. It has been much doubted whether he did not, in the use of this species of signs, often deceive himself, and imagine that he was giving his pupils solid instruction, when he was merely giving them a word without any idea being attached to it. It is said that, by a certain set of arbitrary signs, the Abbé could convey to his pupils any sentence, which they could put correctly into language; and yet, these same pupils were unable alone to express their own thoughts in the simplest language. Such would be very likely to happen if great care was not observed to impart the use of language otherwise than by arbitrary Signs. These signs, therefore, must always be used with judgment and circumspection, lest the Teacher fall into the error of connecting a word merely with a gesture, instead of associating it with the idea which it is to represent. It must be remembered that such signs have little

to do with nature, and are as artificial as spoken language itself.

So universal is the habit amongst mankind of associating their ideas with sound, that it becomes a difficulty to conceive it possible that ideas can be associated with written characters without the intervention of sound. Men learn to speak previously to their learning to write : articulate sound, therefore, becomes the representative of ideas, and writing the representative of sound. It is thus that writing is not the representative of thought, but of sound. It was probably from this circumstance that most of the earlier Teachers dwelt so much upon the use of articulation as a means of instructing the Deaf and Dumb.* The value of articulation has been the theme of much discussion amongst Teachers, and, in the present day, it has not found, from universal consent at least, its true position as an auxiliary in instruction. It will be readily seen that it cannot

* Persons who are anxious to know something of the plan of teaching Articulation, will find much information upon it in *Dr. Wallis' Grammar*, in an introductory chapter, which he entitles—"De Loquela, sive Literarum omnium Formatione, et genuino Sono." A translation of this is also to be found appended to "*Greenwood's English Grammar.*" *Harris' Elements of Speech* may also be consulted, where there are some valuable remarks on the subject, chiefly taken from a Work, written by Conrad Amman, M.D., on *Teaching Speech to the Deaf and Dumb*, published at Amsterdam in 1690. No work that has ever appeared surpasses Amman's "*Dissert. de Loquela*," in the analyzation and arrangement of the vocal sounds ; and Boerhave informs us, "so minutely had he inquired into the structure and action of the organs of speech, that if his life had been longer preserved, he would have explained the physical causes of the various kinds of voice in other animals."

be to the Deaf-mute what it is to those who both hear and speak, and much of the power and force of articulation can never be conceived by the Deaf and Dumb. The Deaf may articulate, but they have still no idea of sound; they can never know the variously-modulated intonations of melody; the variety of emphasis, which marks the difference between commanding and entreating, is lost to them; they are strangers to the tender voice of sympathy in suffering; no sweet sounds of music can ever reach their soul; and no instruction in articulation can ever restore the Deaf and Dumb to a consciousness of these blessings. The gratifications, therefore, which flow from the interchange of our ideas, through the means of "sweet sounds," as such, must for ever remain unexperienced by the Deaf and Dumb. It is only, therefore, in a limited extent that articulation, under any circumstances, can be made applicable to their condition. In the case of those who hear, speech is addressed to the ear—it is the variations of sound that to them are expressive. To the Deaf and Dumb, it is the position of the lips, and other vocal organs, that become associated with language. Now hearing and sound are fitted to each other, and so adapted by nature as to have the most intimate relationship. Hearing has been fitly denominated the "mirror of speech;" but reading on the lips is not that to articulation. It is cold and lifeless in its association, compared to that of sound and speech. It has been maintained by some, that it

has a *special* value as an auxiliary in instruction. But in this respect we confess that we have never been able to discover its peculiar advantages. "Its great usefulness is to be considered as a means of communication amidst society, and the only advantages that it can have over writing is its rapidity and readiness, for in it the lips will move quicker than the hand, and it does not need tablets and writing materials, which writing always requires. But, on the other hand, the imperfection of articulation, which the great mass of the Deaf and Dumb never get over, is a disadvantage which is to be set against its advantages. Did articulation require little or no time to master its difficulties, its importance as a branch of instruction would be less questionable. But it is acknowledged that the time and attention it requires are great, and must often be bestowed by sacrificing some other acquirement. The facility of acquiring expertness in reading on the lips, and articulating sound, is in some instances considerable, and in such cases to teach articulation may be practicable; but we must examine carefully what are really *practicable cases*. Suppose a mute to manifest just sufficient aptness for acquiring this species of knowledge as, that by constant application during the period allotted to his education, he may be taught to speak and to read on the lips of others a limited vocabulary of words — suppose, too, that he speaks but imperfectly, as, except after very long practice, and very persevering correction, he will often be most

likely to do — suppose, on the other hand, he reads more imperfectly still, (for this latter art is more difficult than the former.) will such a one, on quitting his instruction, possess a knowledge of spoken language sufficient to make the advantages we have enumerated his? Will he be able to communicate with such rapidity and clearness as to give him the valuable properties of articulate language? Will he not, on the other hand, feel the necessity continually occurring of repeating and re-repeating his own words, and of demanding a similar repetition from others; and will not this render the use of this imperfect faculty irksome to him in the extreme? And if, moreover — and this is a most important consideration—in the long period of close application, necessary to acquire even the little that he has to boast, his mental cultivation shall have been neglected, can he be said to have gained a fair equivalent for what he has thus lost? In such a case can it be said that to teach articulation is *advisable*? In cases of imperfect deafness, where the degree of hearing still retained enables the Deaf-mute somewhat to imitate sounds, or where extreme facility is shewn in acquiring the benefits of articulation, it may be practicable, but in ordinary cases it is not so.* In theory, then, it may be true that the instruction of the Deaf-mute is carried to its highest degree of perfection

* This view of the subject is taken from one of the Reports of the New York Institution, and the eminent names connected with that Establishment ought to give every opinion emanating from it considerable authority.

when the pupil has acquired the knowledge of the language of his country, not only in a written form, but also as it is spoken, by those who hear. But practice must bend to the exigencies interposed by circumstances beyond the power of the Teacher. Of these the principal are the limitations of time and the varying abilities, as well as the physical organization, of the subjects of instruction." For the great mass of the Deaf and Dumb, then, it appears that instruction ought to be confined to language, as expressed under visible forms, or writing. This is more especially applicable to Public Institutions, where the Teachers employed are generally reduced to as few as necessity will permit, and the time allowed by the parents and guardians of the pupils limited to the shortest period. Doubtless, in private instruction, where the efforts of a Teacher are limited to one pupil merely, much may be done with advantage, which in a public establishment and extended over a class, it would not be practicable to attempt.

We trust that sufficient has been said to shew, that great caution is required in the cultivation of the faculty of speech amongst the Deaf and Dumb, and that those who contend for the advantages of its universal adoption, are contending against the facts presented by experience. There is little doubt but that persons have been deceived in this branch of the Deaf-mute's instruction, by witnessing the proficiency of some few pupils, who have had naturally good voices, and who, probably, could hear a little,

or who had, perhaps, lost their hearing after some advance had been made in articulating words. Such examples of proficiency may have led people into the belief that such instances presented the degree of perfection to which the practice could be carried generally. But let such persons enquire into the proportion of the Deaf and Dumb who attain this proficiency, and they will find that such perfection is not the rule but the exception.

We have endeavoured to shew in the preceding remarks, that articulate language is not the means best fitted for general communication with the Deaf and Dumb, inasmuch as its acquirement is more uncertain and tedious than that of writing. But it is *written language*, or speech under *visible forms*, that the Deaf-mute must be chiefly made to rely upon for his intercourse with the rest of mankind. We have before stated, that it is by gestural language that the Deaf-mute is introduced to the knowledge first conveyed to him by the Teacher, and that it is by the same means that he himself makes his thoughts and desires known. In the case of the Deaf-mute, therefore, gestural language becomes associated with thought, as spoken language does with us ; or, to use a popular expression,—we think in words, he thinks in signs.

It has been already remarked, that a great difference exists between the language of signs and that of written language. To change gestural expressions into their equivalents in English, is not, there-

fore, merely a literal change of symbols; and this great difference in the characters of the two modes of expression, renders the acquirements of the new language to the Deaf-mute one of considerable labour and difficulty. It is long before he gets over the idioms of his own original language, and, as we have before observed, not until he can be made to associate written language with thought shall we find his written phraseology free, easy to him, and devoid of those peculiarities which are so generally visible in the compositions of the Deaf and Dumb.

It requires but little acquaintance with the operations of the human mind, to be well aware how powerful is the influence of the retroactive agency of language upon thought; and all who are conversant with metaphysical speculations, know how much the mind, in its reasoning functions, is influenced by the signs which it employs. The ease and the accuracy, therefore, of the mental process will always, more or less, depend on the nature of the signs present; if these be undefined, general, and vague, there will be little that is clear or defined in the mental process, while, with a language definite and precise, with its relations well methodized and understood, such as exist in all languages which are highly cultivated, the operations of thought will be considerably facilitated. The language of signs, in its character of a thinking medium, but feebly tends to improve the reasoning

principle, while the language of words is a powerful auxiliary in developing the logical faculty.

In giving, therefore, the Deaf and Dumb a knowledge of written language, we are not only conferring upon them the means of communicating with society, but are bestowing upon them a most efficient help in the improvement of their reasoning powers. It is curious to observe what strange fancies are formed when persons speak of things with which they are unacquainted. We have sometimes heard it remarked, that the Deaf and Dumb have an extraordinary power and facility in written language, and that their expressions are finer and more forcible than those of ordinary people. Such opinions could only arise from a want of due consideration of the subject; though it is not improbable, that the displays, which have degraded the proceedings of certain Teachers, egregiously magnifying the acquirements of their pupils, have to some degree tended to create this erroneous impression.

To accomplish the end of making the Deaf and Dumb associate their ideas with written language is a long process, and we fear is, but in few instances, completely attained; not, however, because there is anything in the principle of this association improbable or unphilosophical, but because the pupils are not a sufficient length of time under the necessary instruction. We shall not enter here into any arguments to prove the position we have advanced, namely,

that the Deaf and Dumb can associate ideas with written language, as that position has already been sufficiently established.* The association of thought with written language will, doubtless, give to the latter a very different character to that which it assumes with those who hear and speak. With us a word is a complex idea composed of its several sounds, as in the word e-le-phant, or it may even be divided still more—into its letters. But with the Deaf and Dumb there exists no such division. Such words are expressive of an idea, and remembered only as a simple sign. The Deaf and Dumb, therefore, regard words "as units, in the same way that we regard letters; and the various objects around them are so many simple objects of thought." On this Dégérando remarks, that "written words awaken in the Deaf-mute the conceptions of things themselves, in the same manner as they awaken in ours the conception of sounds, with this difference, however, that polysyllabic words recal to the Deaf-mute but a single idea, while they recall to us a number of sounds at once. We cannot, therefore, doubt, that for the Deaf and Dumb our alphabetic writing, losing this character, can become to them truly ideographic." Now one great aim of the Instructor must be to accomplish this end; namely to make written language

* Jerome Cordan, a learned Professor at Pavia, so early as the 16th centuary, says—"Writing is associated with speech, and speech with thought; but written characters and ideas may be connected together, without the intervention of sounds, as in hieroglyphic characters."

the immediate representative of thought with the Deaf and Dumb; and although his great difficulty is to give the pupil a familiarity with, and facility in, using Language, still the interest of the Teacher should never cease till he overcomes all difficulties and makes written language to them the immediate representative of their ideas. We know it is difficult even with those who have all their faculties to acquire a new language so that it may become to them the immediate sign of their ideas. An Englishman is long before he can master French or German so completely as to be able to make it take the place of his mother tongue; that is to say, "before he can think in it." Nevertheless it is a matter to be accomplished, and though, in the case of the Deaf-mute it may not always be attainable, it is a principle that ought never be lost sight of in their education.

We have already mentioned that gestural language is very different in its constitution to written language, that there are many species of words in the latter that have no representatives in the former, and this again is for a long period a stumbling-block to the Deaf-mute. A single action, where the eye, face, and hands will speak simultaneously, represents at once an idea which would require many words to express. General and abstract terms have no corresponding terms of equal significancy in sign language, while the various relations expressed by conjunctions, prepositions, relatives, and inflections, are without equivalents in natural language. The

order also of natural language is extremely different to that of written language. We know that in various spoken languages much difference exists in their collocation. If, however, there be a natural order in the succession of thought, one would imagine that gestural language would assume that order.

Dr. Spurzheim refers the variety exhibited by different languages* in this respect, to the cerebral developement of different nations, and considers that the difference between the French, who take the noun before its attribute, and the English, who place the adjective before the noun, depends upon the larger endowment of the organ of individuality, which is more prominent in the French than the English. If such a supposition be correct, gestural language, perhaps, will represent the same variety of form according to the peculiar organization of different individuals. Be this, however, as it may, the difference between the order of gestural language and that of the English language presents a difficulty which the Instructor has to use considerable care and attention to get his pupil to overcome. The order of natural language appears, as far as it has been investigated, to be what in the English language would be considered the inverted order: "the subject comes before the attribute, the modifier after the modified, and the object before the action." The early efforts in composition of the Deaf and Dumb will betray in them

* Philosophical principles.

this arrangement of thought, and such examples as "beautiful dog," will be written "dog beautiful, "large lion"—"lion large," &c. &c. We have endeavoured to show the relation between natural language and the language of written signs, and to point out what ought to be the principles kept in view by the Teacher in his instructions in it. Natural language is the point where he must commence, and written language (so far as the instruction is *special*,) is the place where it ends. With a full knowledge of written language all the great truths of revelation are opened to them, and the repositories of learning are no longer sealed volumes. So educated, the Deaf-mute is able to enter upon any branch of study which his taste dictates or his situation demands. The Teacher, however, while giving the use of language, will not neglect at the same time to store the minds of his pupils with such useful knowledge as is suited to their understandings, and more especially will he endeavour to impress them with their duties as children, citizens, and christians, so that, with the divine blessing, when they leave him, they will depart with such useful information, and such christian dispositions as will enable them to become useful members of society and humble followers of Christ.

We do not enter here upon the particular *methods* which must be followed in teaching; our object has been more to develope the principle upon which all methods must be built. No method, however, will be successful that is not founded on the principle of

Analysis — that principle by which alone science can be successfully investigated or truth developed — that which proceeds by advancing from the simple to the compound, from the consequences to the principles, or in other words, from the simple elements to the rules; these being nothing but the generalization of the simple elements themselves.*

Language itself has been formed upon this principle.† It was mentioned when speaking of Natural

* The great art in all education is the art of simplifying; it would be very easy to show the absurdity of many works written purposely for children which are far more adapted for the intellectual developement of mature age, than the tender years of childhood. A great requisite in all instructors therefore is this mental power; but especially is it of importance to Teachers of the Deaf-mute. It is by no means so easy a matter as it is generally supposed to simplify for the capacity of children. It is much easier to overleap than to come down to their mental condition. "In the case of the Deaf and Dumb the Teacher has to begin by instructing them in the use of the simplest words," says Mr. Baker, "and, even after they have gone through half the period usually allowed for their instruction, an ordinary child of three or four years old has a large stock of ideas compared with them."

† This view of language ought to shew the absurdity of allowing children to spend so many wearisome hours over the vague generalizations of *grammar*. To those who have carefully considered what the education of children ought to be, how forcible are the following remarks by Dr. Beddoes.—"According to the modern practice of education, instead of suffering children to follow the active tendency of their nature, or gently directing it, we forcibly debar them from the exercise of their senses, and condemn them to the horrible drudgery of learning by rote the conceits of a tribe of sophists and semi-barbarians, to whom it is no reproach not to have entertained just ideas either concerning words or things. Next to actual blindfolding and muffling, to oblige children to learn the terms in which these conceits are couched, is the happiest contrivance imaginable for keeping their minds unfurnished—by long continuance of sedentary confinement we hold the perceptive faculties as much as

Language, that certain spontaneous sounds were natural to man, and expressive of certain emotions; a developement of thus associating sound with ideas would produce language. It is upon the same principle, that from natural signs, the Deaf-mutes extend their gestural language into conventional signs. Men who have reasoned about the formation of language after examining the nature of Grammar, and who have considered it so difficult a matter, have overlooked the fact that no language ever arose at once into the perfect symmetry exhibited in the tongues of a civilized people, and that to use speech it is not necessary to understand Grammar. We may be assisted to a correct view of this subject by a glance at the kindred one of Logic. No one would suppose that mankind did not reason before the time of Aristotle, who discovered the great principle upon which all reasoning is conducted; and at this

possible in a state of perfect inaction, at the same time we employ the organs of speech in pronouncing, and the memory in retaining, none but sounds insignificant, so that from the commencement of a liberal education one might be led to conclude that the following is the only sentence ever written by Mr. Locke, which his countrymen have attempted an application: 'If it were worth while, no doubt a child might be so ordered as to have but a very few ideas till he were grown up to be a man;' and that nothing might be wanting to satisfy us that our apparent cruelty is *real kindness*, it has been clearly proved that the principal rules laid down in grammar are false, and the exceptions groundless! Let the moralist, when he has verified this fact in the writings of Mr. Tooke and his fellow-labourers in the philosophy of language, determine whether it be an act of greater humanity to preserve the Africans from slavery, or deliver children from *grammar.*"— *Observations on the Nature of Demonstrative Evidence, &c.,*" page 65, et seq.

time do not savages reason and speak without knowing either the Rules of logic or grammar? It is one of the benevolent provisions of Nature that it is unnecessary for the operations of man's faculties, either mentally or bodily, that he should know the laws by which their action is governed. How long did he use his arms and his legs before the anatomy of those parts were known, or the beautiful mechanical contrivance that regulates their action understood—his sight before the laws of optics were discovered — and how long has he exercised his mind, though even yet much of its philosophy is unrevealed to him. Nothing appears further from the truth than to suppose that it requires philosophic wisdom to invent a word.* The occurrences of every day disprove such a supposition, since we find that any ordinary mechanic, when an invention or discovery requires it, has no difficulty in naming with sufficient propriety his production. If indeed words were to be framed without having ideas attached to them, a difficulty might occur, but such is not the order in which speech has been formed. It is probable that it was not till long after man had made a considerable advance in the use of speech, that visible characters, or written language, was invented. It has been conjectured, and probably with truth, that it had its origin amongst the Chaldaic priesthood. The character of that body, with its mysterious rites

* Dr. Adam Smith speaks of the "Metaphysical abstraction, and profound discernment, of the Inventors of Specch."

and its thraldom over the public mind, was well fitted to call forth an art, which, both from its convenience as a means for secret correspondence, and from its being likely to add still more to those mysterious powers which it seemed to possess, was one not less desirable than useful. An idea may be taken of what effect such a power would confer over an ignorant people from an anecdote related in Mariner's "Tonga Islands."* But if we consider, in addition to the astonishment which such a power was likely to produce, that their priests came avowedly invested with supernatural powers, then the two facts would strengthen each other, that the priests were truly god-like, and the art was

* "This mode of communicating sentiments (writing) was an inexplicable puzzle to Finow; he took the letter again and examined it, but it afforded him no information. He considered the matter a little within himself, but his thoughts reflected no light on the subject. At length he sent for Mr. Mariner, and asked him to write down something. The latter asked him what he choose to have written; he replied, put down me. He accordingly wrote 'Feenow,' (spelling it after the strict English orthography). The Chief then sent for another Englishman, who had not been present, and commanded Mr. Mariner to turn his back and look another way, he gave the man the paper and desired him to tell what that was: he accordingly pronounced aloud the name of the king, upon which Finow snatched the paper from his hand, and, with astonishment, looked at it, turned it round, and examined it in all directions; at length he exclaimed, 'This is neither like myself nor any body else! where are my legs? how do you know it to be I?' and then without stopping for any attempt at an explanation, he impatiently ordered Mr. Mariner to write something else, and thus employed him for three or four hours in putting down the names of different persons, places, and things, and making the other man read them. * * * This as much resembled witchcraft as anything he had ever seen or heard of."—*Constable's Miscel., Vol.* 13 *pp.* 114-15.

amongst the mysteries hidden from the vulgar mind. Such was probably the origin of that art, the greatness of which no modern discovery has surpassed. Printing, which is modern, and which has obtained for Faust the celebrity of Satanic wisdom, as an invention, is far inferior to writing. In the first place it has not the originality of conception of conveying ideas by visible signs; and in the second place, there was much of an analagous character to printing (considered as an art for multiplying copies) previously to the time of Guttenberg. The old German carten-makers had worked at their craft, and wooden blocks had been printed from them, long before the time of the ingenious citizen of Mentz.

Pictures and the Manual Alphabet are both extensively used in the education of the Deaf-mute; but the principles upon which these become useful are, in the case of pictures, as being one form of Natural Language; and Dactylology is only "writing set free from its material dress." Pictures are representatives of objects, actions, and expressions; and they are used in the instruction of the Deaf and Dumb to exhibit such subjects, when the objects themselves cannot be conveniently obtained. Degerando has so beautifully described the nature of Dactylology, and the uses it has in Deaf-mutes' education, that we shall present his observations instead of any description of our own. "Dactylology," says he, "is to alphabetic writing what that is to speech.

Formed upon writing as its model, it represents it precisely as writing represents words. But in this connection between dactylology and writing, the reciprocal utility of the two orders of proceeding is at the same time the reverse of what we have remarked in the connexion between writing and speech. In fact, the office of dactylology consists in giving to writing that moveableness which speech enjoys, and which the first loses in the fixedness of depicted characters. Dactylology is writing set free from its material dress and from those conditions necessary for the employment of the pen or pencil; it carries with itself these instruments; it is thus ready in all familiar conversations; it affords help at all times, and in all places. It is thus that dactylology is little more than a toy for those who already possess in speech a means of communication more easy, and more appropriate to all circumstances. It is thus also that it becomes an essential resource to those who are deprived of speech, to whom it renders a portion of those advantages, supplying for them writing, and giving it in some manner a new extension. However, dactylology is far from affording all the advantages of speech, while it loses a portion of those which are peculiar to the privilege of writing. On the one hand, it is much less rapid than speech, it is unfurnished with that expression which belongs to the human voice — of that infinite diversity which the soul finds within for pourtraying all the sentiments which affect it: it has nothing of that

harmony, that secret charm, that power of imitation of which speech is so capable; its employment, besides, obliges the suspension of all business, and all action. On the other hand, it has none of that durability which renders writing so favourable to the operations of reflection; it is not able to exhibit its signs but after a successive manner, it cannot preserve in composing, as writing does, those vast pictures which the inventive faculty embraces simultaneously, and subsequently surveys in every sense with perfect liberty. Dactylology shares in some of the inconveniences of speech, and in some of those of writing: it is as fugitive as the first, and it is as complicated in its forms as the second." Many have a very erroneous idea of the value of this auxiliary in educating the Deaf-mute; imagining that all these persons naturally can understand language if it is only conveyed to them by the finger alphabet. Nothing can be further from the truth. Dactylology, after the alphabet has been acquired, will only be available in proportion as a knowledge of language exists; and in proportion only as the pupil advances in the knowledge of words and their combinations, in the same proportion will be his power of availing himself of "finger talking."

We have now sketched briefly the principles on which the instruction of the Deaf and Dumb must be conducted, and hope from what has been said that the necessity of providing an education suitable to their infirmities will be felt by all who take an

interest in alleviating the sufferings of their fellow-creatures. The ordinary method of instruction cannot meet the wants of this class of children, and as the far greater proportion of the Deaf and Dumb are the children of parents in humble circumstances, the education of such children must necessarily depend upon the efforts of benevolence; unless, therefore, the public are made aware of their peculiar wants, and fully made to comprehend their peculiarly distressing condition, the necessary provision for their improvement cannot be expected. The chief object in giving these pages to the public, has been to endeavour excite for the Deaf and Dumb a more general sympathy — to plead the cause of those who cannot plead for themselves. There are doubtless many cases of misfortune that call loudly for the aid of benevolence and charity to soothe and to comfort their suffering, but there are few whose lot is more depressing than that of the Deaf-mute. Persons so afflicted, if left without the advantages of education, are deprived of all those hopes which can make this life cheerful or give the prospects of a future and a better. "How gloomy," says Johnson, "would be the mansions of the dead to him who did not know that he should never die;" and such must be the gloom of every uninstructed Deaf-mute. Let us then hope that ere long the wants of the Deaf and Dumb will be better and more generally understood, and that the fostering hand of benevolence will leave no deaf and dumb child without the means of instruction.

REMARKS ON DEAFNESS,

WITH HINTS FOR THE EARLY TRAINING OF THE DEAF MUTE.

The disease of Deafness is one that has been less successfully investigated than most others, and medical treatment has but seldom been advantageously employed in its cure. There is no doubt but that it is produced by various causes; sometimes being congenital, sometimes arising from disease in the ear taking place soon after birth, and it not unfrequently remains after small-pox, fever, measles, &c. If deafness happens before the fifth or sixth year, dumbness will follow; and even at a much later age the child will manifest a great disinclination to use speech, should it become deaf. In such cases, however, a parent will early see the necessity of enforcing the use of the language which has been learned, and the child, after a little practice in speaking without hearing himself do so, will feel less averse to it.

The causes of congenital deafness are often difficult to be traced, and the facts collected upon the subject are not sufficiently extensive, nor accurately ascertained, to allow much explanation of its production. It has been often observed that

cases of congenital deafness are frequently found amongst persons who are of a strumous habit, and that the disease has a tendency to appear where marriages of consanguinity have taken place. It is probable that there is no institution for the instruction of Deaf-mutes, that does not contain several pupils who are the offspring of cousins.

Nevertheless, it cannot be denied that there are many instances of families where intermarriages have taken place without deafness having appeared. The proportion which children born deaf and dumb bear to those who become so after birth is not very accurately known, and there is much difficulty in the way of ascertaining this proportion with precision. It rarely happens that parents have observed any defect in the hearing of their children until they are expected to articulate. It is not improbable, therefore, that in many instances where the disease is thought to be congenital, that it may have commenced after birth, and the time of its commencement escaped the notice of the parents.

The statistics which have been published by different institutions on the comparative numbers of those born deaf and dumb and those who have become so afterwards, vary considerably. In a circular issued from the Dublin Institution it is stated that in 489 Deaf and Dumb children, 423 were born so, the remaining 66 losing their hearing after birth from various accidents and diseases. In the thirteenth Report of the Hertford (America) Asylum, it

is said, that out of 279 pupils 117 were born deaf and dumb, 135 lost their hearing in infancy, and 28 were doubtful. These two statements differ considerably in the proportion which the two classes bear to each other, and though the induction, in both instances, is too limited to allow us to draw any general conclusion, still it is probable that the difference between them results from that liability to error which we have referred to above — a want of accurate observation on the part of the parent; and it may not be too much to say, that when the statistics of Deafness are more accurately obtained, Congenital Deafness will bear a less proportion than it appears now to do, amongst the unfortunate subjects of this disease.

Congenital disease may be considered as arising from two causes — hereditary tendency, and accidental interruptions of the fœtal developement at some period during gestation. Hereditary diseases, in general, are involved in considerable obscurity; and Deafness offers no exception to this absence of information. In looking at instances where deaf and dumb persons have married, we do not find that the offspring generally are deaf. Out of several cases which have come within our own personal knowledge, where either one or both of the parents were deaf and dumb, only one instance occurred where any of the children were afflicted with this disease. In this instance the father only was deaf and dumb. This absence of anything like regularity

in the transmission of the disease has led some to deny its being hereditary.* We have already observed, that little is known about the transmission of disease from one generation to another, but that such a law exists in Nature cannot be denied. With regard to Deafness, the cases we have mentioned show that it is not invariably transmitted, nor indeed, generally: can it therefore be said to be an hereditary disease? Perhaps Deafness cannot be considered as hereditary, in one sense, while in another it may. We may suppose an hereditary tendency to exist to a peculiarity of constitution, and that this constitutional taint is liable to a certain class of diseases, of which deafness is one. So while a diseased constitution, where deafness has a tendency to appear, is transmissable, the particular form of that disease is not invariably so, but may or may not appear according to modifying circumstances. If it be ascertained that deafness is often found accompanying scrofulous affections, and that there is a tendency in such persons as have a strumous taint to have the organs of hearing diseased, then we may look upon deafness as most likely to appear in the children of scrofulous parents. But since the diseases incident to this peculiar constitutional taint vary in appearance, the organ affected in the parent may not be the one affected in the offspring; and so while the parent may be deaf, the child may not be so,

* If the deafness of the parent occurred *after birth* we would not anticipate the transmision of the disease.

and while the parent was free from deafness the child may have the organs of hearing diseased.

We have heard mothers of deaf and dumb children frequently attribute the infirmity of their child to strong and disagreeable impressions received by them during pregnancy. Whether an interruption of the fœtal developement took place in such cases, or not, it would be very difficult to ascertain with certainty; but that strong impressions have an influence on the child at this period a variety of observations would lead us to believe. During such time, therefore, mothers ought to avoid everything likely to startle or give them unpleasant trains of thought, and such injurious impressions are more especially to be guarded against in the earlier stages of pregnancy — a time when least attention is generally paid to such precautionary measures. That deafness often arises in early infancy from a want of careful management on the part of the mother is very probable. It is well known that the proper management of infants has been, and indeed now is, deplorably neglected, and not unfrequently altogether perverted. The great mortality which exists in infancy, and which has been fully shewn to be greatly influenced by improper treatment, renders it likely that this is also the season when many diseases are sown in the constitution, which only become visible as they ripen with the development of the body; aud that we must attribute to our bad infant-treatment, not only the death of about 1 in 5 of our infant population, but also the same pro-

portion of misery which awaits us in our riper years in the form of disease.*

In Mons. Quettellet's Treatise on Man he has shewn how remarkably even slight influences operate in modifying physical development; and every page of his work abounds with facts which are calculated to impress the most serious lesson on the mind of a mother, if she would ensure for her offspring a constitution free from disease. To do this she must begin to consider the welfare of her child in the earliest stage of gestation, since her state of health, both of body and mind, during this period, operates strongly for good or for evil on her future offspring. It ought, therefore, to be considered a sacred duty in a mother to avoid, during such time, every thing likely to injure her child. There are certain laws which the Creator has established to govern the habits at this period, and these cannot be neglected with impunity. How often does a sorrowing mother lament

* The following is an extract from Mon. Quettelet's Treatise on Man, and the Developement of his Faculties; a work which all interested in the physical and moral improvement of man must consider of the highest importance. Mon. Quettelet remarks, "What first occupies our attention is the great mortality of children after birth. To have an accurate idea of this, it is sufficient to consider that, in town as well as country, four times as many children die in the first month as in the second, almost as many as during the second and third years, although the mortality then is very great. Indeed the Table of Mortality shews that one-tenth die in the first month after birth." * * * * "The mortality is so great, especially for male children, that, from the first year after birth, the number is already reduced one-fourth. The loss of boys in towns is such, that, at the fifth year, out of 10,000, there are only 5,738 remaining."—Chap. V.

over her suffering Deaf and Dumb child, forgetting, that she forms no exception to the general ordination of Providence, and that her affliction is only a necessary effect of some disobedience to an established fiat of the Almighty will. She may have sinned ignorantly, but not the less on this account is her disobedience punished. The regulations which ought to govern the habits of a mother during this important time it is not our province here to examine. This knowledge has already been placed within the reach of every intelligent parent, in the excellent work of Dr. Combe.* This early period of a child's being has been said by a learned physician "to be the real fountain of physical education," and no future attention can compensate for errors committed at this time. We have remarked that early infancy is probably the age when deafness is often produced. The very complicated structure of the ear is soon affected, and is not always at once easily discovered to be diseased. We know that the eyes of children are soon injured; and if a glaring light be allowed to fall upon them, or care be not taken in respect to cleanliness, variouss dieased states of these organs arise; but any affection in these parts is easily observed, and we apply the remedies which are necessary. But when the hearing is affected, we have no such direct guide to it, and the disease may proceed until some of the delicately-distributed internal parts are destroyed. And we only discover

* Dr. Combe on the "Management of Infancy."

the fact when we expect the child to commence its prattle. No period of life requires more vigilance than infancy; it is then that the foundations of the future structure are laid — and if that structure is to be strong, symmetrical, harmonious in its parts, and useful in its adaptation, we must begin with such a design in our earliest labours. These qualities may only become visible when the loftiest pinacle is finished, but they must have their beginning in the foundation.

When a mother discovers that her child differs from ordinary children, that it does not attempt to repeat the sounds which she supposes it to hear, and that it allows her words of affection to pass heedlessly by, she becomes alarmed, and finds at last, though very unwillingly, that it is deaf, and *consequently* dumb. The anxiety of a mother in such circumstances may be more easily conceived than described —her painful doubts, her anxious desires, her blighted hopes, all at last only quieted by the melancholy fact, that nothing restores the use of that sense which her child wants.

Her first care, of course, when she finds her child does not hear, is to consult some medical practitioner. In this she must use prudence, if she would avoid giving her child unnecessary suffering. There are always men to be found, if we are to believe their own statements, that have remedies for all diseases. Let such practitioners be doubted. As modesty generally accompanies talent, so pretence most frequently

indicates ignorance. Let the person whom she consults be a regularly-admitted practitioner — a man who has a reputation of talent and integrity at stake. One having directed particular attention to aural cases may naturally be expected to be more successful in such diseases than one who has not paid marked attention to this branch of his art, and to such an one she will naturally give a preference. As we have remarked elsewhere, experience shows, in most cases, medical treatment fails to restore hearing, and a mother's hopes are again doomed to bitter disappointment. She now begins to think seriously of her child suffering permanently under this unhappy calamity, and she becomes anxious to know what can be done by other means to ameliorate its condition. She finds that from the absence of hearing she can not teach him as other children are taught, and that as he grows up he does not acquire the use of that most important faculty, *Speech*, but remains unable to listen to, or to return her words of affection. Thus she sees him from day to day remain a stranger in his home — unable to mingle in the lisp and prattle of his infant brothers and sisters, or hear the merry tale of the domestic hearth. It is not surprising that a parent so situated weeps over her misfortune and spends many anxious moments endeavouring to obtain the means calculated to ameliorate her child's distress. Her very anxiety often leads her from the only course which she is able advantageously to pursue.

Early attention to the physical developement and moral training of all classes of children is of acknowledged importance, and the Deaf and Dumb do not, from their peculiar condition, form any exception to this law of Nature; but, on the contrary, demand if possible a more careful attention in such particulars than others. On the parents of deaf and dumb children, then, this duty devolves, and it is of immense importance. For if it be neglected, no future education will be able to compensate for its loss. We have thought it advisable in this Essay to offer a few remarks on this subject, since experience has taught us that very frequently the true interests of the Deaf and Dumb suffer materially from a neglected early training. There are no institutions for the Deaf and Dumb, in England at least, where they are received sooner than the age of seven; and it is for children, therefore, under this age, that our remarks are chiefly to be applied. The first great object, at this age, is physical developement — to see that the bodily organs are properly regulated, so as to induce in them the most healthy action of which they are capable, and to improve the constitutional vigour of the child. Wholesome and nourishing food, without being too stimulating; exercise in the open air; sufficiency of sleep and repose; attention to cleanliness and proper clothing, are the heads under which Physical Education may be classed. To adapt these particulars to the constitution and circumstances of her child, must

chiefly occupy the mind of the mother. Let her not trouble herself to make her child "an intellectual prodigy, which is an anomaly in nature," but let her anxiety be to produce a perfect and healthy organization, which afterwards will be able to withstand the fatigue which will be required in the coming years of mental labour. Intellectual education during these years will of itself proceed. Although the Deaf-mute may be shut out from hearing the sounds that are passing around him, his eyes will be active, and few things will pass before him which he will not attentively observe. By such means he will make himself acquainted with common objects, and the uses to which they are applied; and even with the limited intercourse that exists between him and his friends, he will be able to express his pleasure and his grief.

While his intellectual instruction need not occupy particular attention, his *moral training* will require the greatest care. He will soon begin to shew ebullitions of passion and waywardness, which, if unattended to, and unchecked, will soon become a source of grief both to himself and his friends. Let every attempt which he makes at communication be patiently attended to. Endeavour, as much as possible, to enter into his sympathies, his pleasures, and his pains; his likes and his dislikes; and try, by your own example, to direct his feelings into such channels as virtue and religion demand. Never heedlessly turn away from his observations, nor con-

sider them tedious; but however imperfectly you may understand his signs, always endeavour to do so, and never let him witness in you a want of interest in his welfare. His state of isolation is deplorable enough already, and a heedlessness on your part will have the tendency to make it more so by preventing him from offering such attempts at communication as his circumstances permit. Remember, that though he is a stranger to your discourse, he has the same feelings as yourself—he loves and he fears, he rejoices and sorrows; and though he cannot hear your words, he can still read the language of feeling. Never, then, subject him unnecessarily to unpleasant impressions! treat him ever with kindness and affection, so that such feelings may beget similar ones in himself. Love him—let him feel that he is loved, and he will love you in return. It is true that the soft and soothing tones of a mother's voice cannot reach him; but a language little less expressive is open to him—the language of the eyes. Look at him in affection and tenderness—smile upon him in earnest love—and his heart will be open to your discourse.

Nothing can be more striking than the difference of character produced in the Deaf and Dumb by early training, and which is so visible on their entrance into an Institution. Those whose unfortunate lot has been rendered harder, by the cruel treatment of heartless men, have no confidence in you. They have become, like savages, suspicious and cun-

ning; and it is a considerable time before kindness and instruction can produce any degree of openness of communication. Their moral qualities have never been called into activity; while in self-defence against the ill-usage of others, their cunning and selfishness have been continually exercised. In those whose early training has been well cared for, a great difference is presented. They are more open in their manners, kinder and more grateful in their dispositions, and, as a consequence, their progress under instruction is more rapid, and their education less difficult, both to themselves and to their teachers. There is another source of evil in the early management of the Deaf and Dumb, and from it probably arises more error than any other—it is that of ill-regulated affection on the part of the parent. It is unfortunate for many mothers that mere *love* for a child will not alone accomplish the end of maternal duty. Were it so, fewer children would have to regret in after life the neglect of early training. A mother's love ought to be guided by intelligence. Love in itself is a mere animal instinct, and is as liable to abuse as any other feeling; and, unfortunately, the effects of its abuse are more frequently visible than its well-regulated application. The infirmities of the Deaf and Dumb frequently tend, in this respect, against their true interests. It is an ordination of Providence that the intensity of the feeling for the love of offspring bears a proportion to the weakness or helplessness of its object; and thus the misfortune of deafness fre-

quently secures to the sufferer a more than ordinary share of maternal affection. But, alas! that affection too often leads to evil consequences — *irrational indulgences* — the child being allowed to exercise every caprice without controul, and indulge every desire without resistance. Such a mother is the deadliest enemy to her child's happiness—her kiss is fatal. A parent who pampers and spoils her child with such ill-regulated love, instead of conducing to its happiness, is in danger of making it miserable. In proportion as a child finds its power in doing all it wishes, it shews the desire to increase it; and, at last, it becomes a restless, headstrong, and selfish tyrant. The feeling of yielding to every wish of the child, and gratifying its desires, is one of the most unfortunate qualities in the character of a mother. It is the cause of both misery in herself and her offspring: and the probability is, that when her child grows up, all that she will receive for this ill-regulated affection will be coldness and indifference, or worse. She may wonder and talk of the ingratitude of children: but she ought to know that its true cause was in herself. With what anxiety ought parents, then, to watch the early years of children: for, "without such watchfulness," says Dr. Gregory, "they will contract such bad health, such bad tempers, and such bad habits, as will remain with them, in spite of all future care, as long as they live."* Think then what evil may be produced if the Deaf-mute be left to gra-

* Dr. John Gregory's "Comparative View of Man," &c.

tify every capricious wish, and indulge, without controul, every evil passion which may arise in his mind, such evil as all future instruction and moral training may never be able to eradicate. It is not till some advance is made in the instruction of the Deaf and Dumb, that we are enabled to impress them with the knowledge of the attributes of a God, and their duty to him as their Creator and Preserver. They can not for some time learn their state as fallen creatures, and as being objects of a Saviour's love. They have not, therefore, these motives to lead them to acts of duty. At first, they ought to be taught implicit obedience to the will of a parent: and this duty ought to be insisted upon from them with undeviating strictness. So great is the necessity for enforcing this duty, that no parent should, in the first instance, request the performance of any act, if, on the refusal of the child, she is not prepared to insist upon its being done. It is much better not to require it, than, after making the requirement, to let the child escape without obeying. It often happens that, from allowing unimportant requests to pass without being complied with, a child learns to resist more im-important ones: for we cannot expect that a child will be able to distinguish such differences, or, indeed, desire to do so: the only wish it has in such cases is to gratify its own feelings. How great, then, are the duties of a parent, and yet how little are they generally thought of. Even when a mother does feel an interest in the education of her chil-

dren, how seldom is it that her own education enables her to fulfil properly her duties. From a want of knowledge, both on the bodily and mental constitution of her child, she frequently, in her very attempts at improvement, produces the contrary results. In the years of childhood, the chief mental education which is required is the education of the feelings. To train these, so that none shall be manifested too strongly or too feebly, it is surely requisite to have some knowledge of the various feelings which go to form the *character* of man. A mother, therefore, ought to possess a knowledge of the mental faculties exhibited by her child, and how and when to appeal to them as motives to exertion. True it is, that motives are appealed to; but in such appeals there is a want of every thing approaching to definite or systematic knowledge. Any thing like proper attempts to strengthen the feelings, which are but feebly developed, or to repress such as are unduly active, are scarcely ever made. How true and how forcible are the following lines of Mrs. Maclean, referring to the early management of children:—

> "How much they suffer from our faults,
> How much from our mistakes;
> How often, too, mistaken zeal
> A pupil's misery makes."

It is unfortunate that women have never yet been educated with the view of becoming parents. However fascinating and elegant may be the accomplishments which occupy the principal attention in a

young lady's education, they are by no means fitted to supersede higher and nobler studies. Nature has given us faculties which fit us to receive pleasurable emotions from the beautiful in sound, form, and colour: but she has also implanted within us powers which are designed to enable us to perform the duties demanded of us as citizens, parents, and human beings, and when the due cultivation of any of these is neglected, education is imperfect. "That is the best education," says Plato, "which gives to the body and to the mind *all* the perfection of which they are capable." But in modern female education a very partial perfection is thought sufficient. Women are instructed to become musicians, artists, and proficients in dancing (*all* rational pursuits, as far as they *go*); but are they fitted to fulfil the responsible duties of wives and mothers? On these subjects they have too frequently to learn when they should act; and the consequence is, that they rarely accomplish either well. Before, therefore, the education of woman, on whom is to devolve the duties of training the minds of others, at the time when these are most susceptible of impressions, can be called complete, the nature of both the bodily and mental constitution of man ought to form a prominent feature in her studies. Nor, indeed, until such an extension shall have taken place in the education of women, will society be freed from much of the bodily suffering, intellectual inability, and moral degradation, which it now so plentifully exhibits. What

different results would be produced on the character of society, if domestic education were better understood. It is in the first developement of the evil propensities in man, that they are most easily repressed, and when the habits favourable to morality and happiness are soonest formed. How different it would be with education, if parents were themselves what they wished to see in their children. All children have strong tendencies to imitate the actions which they see performed by others. But the imitative impulse is pre-eminently powerful in the Deaf and Dumb. Parents, therefore, of such children ought to be in themselves examples of a Christian perfection: they ought constantly to be alive to the beautiful and the good: they ought to create around their afflicted offspring an atmosphere untainted by vice: no storms of passion—no withering blights of neglect ought ever there to be experienced.

In these remarks we have endeavoured to shew that the chief care of the parent, in the first years of her child's education, ought principally to be devoted to the developement of the bodily organs, and to the formation of good moral habits; and that lessons which would fatigue the mind are not to be attempted. Before seven years of age, any continued application is calculated to fatigue, and becomes more injurious than beneficial. The health obtained by exercise in the open air, the cheerful play in the green fields, is, at this period of life, far more valuable than any scholastic information that can be given.

It sometimes happens, however, that children are prevented from being placed under instruction after the age, when it becomes desirable that they should commence learning easy lessons. A few hints on the kind of lessons which ought to be then given may assist parents whose circumstances require them; and if such instruction were well imparted, it would be of considerable advantage in facilitating the progress of the child whenever it might be placed under a proper instructor. It is rather curious to observe, that almost all persons, who endeavour to give some preliminary instruction to the Deaf and Dumb, begin at the wrong end, and consequently the time and labour of such kind but ill-directed efforts are thrown away. Whereas, if such exertion was but properly directed, it would be of real advantage to the progress of the pupil when placed in an Institution.— In most cases where attempts have been made, either by parents or ordinary teachers — and several instances of both have come within our own experience —to convey instruction to the Deaf-mute, they have generally commenced by writing some text of Scripture, or moral maxim, before the child, teaching him to spell it on his fingers, or to copy it on a slate.— They do not see that, however correctly he might copy the forms before him, they remain still to him only so many unmeaning marks. The words themselves are not to him representatives of the things. A boy was once brought to an Institution where we were, by a village schoolmaster, who stated that he

had already taught him some useful knowledge ; and, being asked to name what he had taught him, said that, amongst other things, he had taught him to know that "the way of God was a good way." Being asked to shew how he knew that the boy understood the sentence, he made the pupil copy it ; and this was to him a sufficient proof, although, it appeared, he had never even attempted to explain either what *God* was, or what the *way of God*, was. Now it would be a considerable time before an experienced teacher would introduce such a sentence to a pupil ; because, before attempting to do so, he must have explained to him something of the nature of the Almighty — of the different actions and thoughts of man — have pointed out those which God commands and approves, and those which he forbids, so as to shew the difference between good and bad, as applied to obedience or disobedience to God's will : and then, after such preliminary instruction, the *way* of God would still have to be explained as a metaphorical expression.

It will be seen, from this that considerable previous instruction would be required before such a sentence could be conveyed so as to be understood. It is hoped, therefore, that a few observations here, on the manner in which such instruction ought to be commenced, and a few examples of early lessons suited to the capacity of the Deaf and Dumb, will be found of use to those persons whose kindness or whose duty leads them to be interested in the wel-

fare of this unfortunate class of children. It is not intended to give anything like a lengthened or systematic view of the subject, nor to enter into an enumeration of the various expedients which sometimes are required for communicating language to Deaf-mutes; but merely to give such hints as are likely to be useful in guiding an ordinary person, in his efforts to be of assistance to them, before they are placed under proper instruction. The first object of the teacher must be to find out such words as will be most easily conveyed to his pupil. He will find these to be the names of the common objects around him, and for which, if the parent is the teacher, a sign will already have been used between his child and himself. Select some of these objects, taking one at a time, and place it before the pupil; if he has a sign for it, he will probably make it to the teacher, and let the teacher receive this as the sign of the object. Let this be done with two or three more objects, then referring to the first object, let its name be written down on a slate or tablet, and to shew the pupil that this is also a sign for the object, remove it, and call a child that can read, and shew him the word, and require him to bring, or touch, or point to, the object which the name represents. Repeat this with other objects, and the deaf and dumb child will soon see that the word and the object have a connexion as well as his sign and the object. The following are words well suited for the first lesson; they may, however,

be altered, extended, or reduced, at pleasure, according to circumstances :—

Pin,	Book.	Hat,	Knife,	Egg
Key,	Ear,	Pen,	Eye,	Saw,
Axe,	Pencil,	Nose,	Cat,	Dog,
Cow,	Cap,	Shoe,	Horse,	Ass.

This lesson can be gone over, frequently until the pupil knows the meaning of all the words. That he does so can be easily ascertained, by requiring him to point out the object in connection with its name, or to make his sign of the object. Such objects as cannot be shewn may be represented by pictures. The child must be taught to write the words, and at the same time to spell them on his fingers, by means of the Manual Alphabet. Thus the exercise will be, first, write the names of the objects, and point out to which object each name refers : then require the pupil to point out the object from the name, or the name from the object ; then make him spell each name on his fingers, and then let him copy the words on a slate.— When he is able to write, let him from your signs, or pointing to the object, write its name. This will be another mode of varying the exercise.

With regard to signs, the child will most likely have already fixed upon signs, by which it names most of the objects given in the above lesson, and which it uses in its intercourse with its friends. These signs had always better be retained ; and if a word has not received such a sign, endeavour to get the child to fix upon one. It will do this most pro-

bably better than you. We give here some description of the signs generally used for a few of the objects named above, which will afford some assistance towards forming an idea of the character of signs for objects :—

PIN.—Indicate on your finger the length of a pin. Make an appearance of holding it between your finger and thumb, touching your flesh with the point, then suddenly draw away your hand, to shew that such contact gives you pain. You may also indicate that it is put into the cuff of the coat, where boys generally keep such articles.

BOOK.—Place your two hands together, in the form of a book ; hold them up before your face, and give the appearance of reading.

HAT.—Draw the hand round, in the form of a hat, and make the appearance of placing the object on your head.

KNIFE.—Make with your finger somewhat in the form of a knife, and draw the forefinger of the right hand over the forefinger of the left, indicative of the act of cutting.

EGG.—Indicate the size and figure of the object ; make signs expressive of breaking the top of the shell upon your fist, and of eating the contents in the manner usually done.

KEY.—Indicate the form of the object, and the act of turning round, and locking or unlocking.

CAT.—Indicate the size of the animal; draw your hands from each side of your mouth, to shew it has whiskers. Stroke your arm down several times, to shew the softness of its fur, and make the appearance of scratching, by applying your nails to your hand, and suddenly drawing it away.

DOG.—Shew the size of the animal, by holding your hand about its height from the ground: then pat your thigh, as is done in the act of calling a dog. You may also imitate its action in barking.

COW.—Draw your hands from your head, as if horns were issuing, and make the appearance of milking the animal.

HORSE.—Put your fingers on your head, in the position of ears: shew that something is put in its mouth, and put yourself in the position of a rider, imitating his movement briskly.

ASS.—Somewhat similar signs as above, elongating the ears more, and making the pace less active.

These examples will help to give some notion of the plan of expressing objects by signs. The general direction for forming such signs is—indicate the size and form of the object, and give its most striking quality. But in all the first lessons, it will be more advisable to teach generally from the object itself, and using, when a sign is necessary, the one

given by the pupil. The following words will also be found suitable :—

Pipe,	Comb,	Bird,	Fish,	Goose,
Slate,	Sheep,	Rat,	Tub,	Desk,
Clock,	Watch,	Fox,	Rabbit,	Hen,
Cock,	Coat,	Pig,	Moon,	Spider,
Fly.	Cage,	Door,	Spade,	Owl,
Thimble,	Needle,	Candle,	Box,	Paper,
Wafer,	Ink,	Inkstand,	Ruler,	String,
Feather,	Bottle,	Brush,	Grate,	Sealing-wax,
Fire,	Potatoes,	Pudding,	Pie,	Cabbage,
Plate,	Desk,	Fork,	Lamp,	Glass,
Bread,	Water,	Man,	Boy,	Girl.

The plan to be followed in teaching here, is the same as given above. The sign generally used for man is made by touching the chin, to indicate the beard, and holding up the hand, to shew his height from the ground. The sign for woman is, to touch the forehead, indicating the parting of the hair, and shewing the height the same as before ; boy and girl are made by similar signs, only reducing the height to the required size. Child is made by imitating the nursing of a mother, shewing the general movement she uses when the child is in her arms. Male and female are shewn by touching the chin for the male, and the forehead for the female. Thus, the sign for a duck would be the bird with the flat bill, and the waddling gait, that swims in the water ; and to distinguish the *drake*, would be the same signs, but with the additional touch of the chin. Where a striking difference

exists in the appearance of the different sex, that may sometimes be fixed upon, as the curled feathers in the tail of the drake, but the other is the general mode of indicating gender. Neuter is of course neither the one or the other. The names of sex, when expressed by different words or by different terminations, only need to be pointed out, indicating each by the proper distinguishing signs.

The article *a* or *an* is expressed by holding up the fore finger indicating one. *An* is shewn to be used only when the noun begins with a vowel, shewing which letters are so called. The plural may be taught at the same time, and is signed by holding up two, three, or four fingers: or suppose the word pin was to be taught, take one pin, and write down *a pin*, then add some more to the one, and shew that it is one no longer, but many, and write *pins*. Many is signed by holding up all the fingers, and moving them backwards and forwards. Thus an exercise on *a* and the *plural* is—

A	Pen,	——	Pens.
—	Cat,		——
—	——		——
—	——		——

Make the pupil here supply the blanks from the word, which has been taught. The word *an* and *plural* may be also shewn in a similar manner—

An	Egg,	——	Eggs,
—	Awl,		——
—	——		——
—	——		——

Lessons on the irregular plurals may be given in the same manner. When the child has made a little progress in his vocabulary, and acquired some facility in writing and spelling, a more systematic arrangement of names may be made, and adjectives commenced, keeping him to such as are expressive of *sensible* qualities. Let the words which you are now to give be such as the child will often be called upon to use; and in enumerating the names of objects, of any class, do not at first extend your list to objects that are not likely to be familiar to the pupil. A general rule which you will do well to remember is, never to oppress the memory of your pupil with words which he will rarely find occasion to use; but rather to keep extending his vocabulary in words likely to be frequently required by him in his endeavours to express himself in language.

In a classified arrangement of words, *articles of clothing* may be the first; it will give many words which will be often required for the child to use.

Hat,	Cap,	Jacket,	Coat,
Waistcoat,	Trowsers,	Shoes,	Boots,
Stockings,	Bonnet,	Pinafore,	Frock,
Shirt,	Collar,	Neckerchief,	Handkerchief.
Button,	Comforter,	Nightcap,	Garters,
Veil,	Muff,	Shawl.	Gown.

Old,	New,	Clean,	Dirty,
Fine,	Coarse,	Ragged,	Black,
White,	Blue,	Red,	Green,
Yellow,	Small,	Large,	Thick,

Thin,	Heavy,	Light,	Rough,
Smooth,	Long,	Short.	Tough.

These are to be taught in combination, as —

A black hat,	A white hat,
An old jacket,	A new jacket,
An old shoe,	A new shoe,
An old shirt,	A new shirt,
A clean handkerchief,	A dirty handkerchief,
A clean coat,	A dirty coat,
&c.,	&c.

The qualities introduced here are such as will be easily perceived by the pupil if objects are shewn him in which such qualities are prominent. If the teacher uses contrasts, as *old hat, new hat,* he will find it of considerable help to him. After this exercise has been taught, the Articles of Food, — Articles in a School-room, — Domestic Animals, &c., may be gone through. To give a little more life to his lessons, the simple words — Bring, Touch, Strike, Catch, may be introduced, and to each new classification of objects introduced the teacher may extend also the list of such simple actions. Such sentences as the following may be written, and the pupil required to perform them : —

Bring a new book.	Bring an old book.
Bring a white hat.	Bring a black coat.
Bring a short pipe.	Bring a long pipe.

With regard to the signs of such sentences, it may be stated that *Bring* will be illustrated by doing the thing required, and *Touch, Strike, &c.,* will be imi-

tating such actions. The pupil may be shewn at first the use of *Bring*, by the teacher requiring another child to perform the action after it is written down. To express by signs, "Bring a black hat," it would be necessary first to point to, or make the sign of, a *hat*, holding up the fore-finger for *a*, then to shew its quality, black, and, lastly, to shew that it was to be brought by the action so expressive. This sentence in signs therefore would stand thus: *hat a black bring*. Numbers may be taught by the use of the ordinary Arithmometer, now generally seen in all infant schools. Let the child be shewn one ball, and shew him that it is called *one*, which he can write down both in figures and in letters, thus: —

*	1 one	* * * * * *	6 six
* *	2 two	* * * * * * *	7 seven
* * *	3 three	* * * * * * * *	8 eight
* * * *	4 four	* * * * * * * * *	9 nine
* * * * *	5 five	* * * * * * * * * *	10 ten.

He may also be made to express these numbers by holding up one, two, three, &c., fingers. Such exercises as the following will be useful both in extending the use of numbers, adjectives, and nouns, and also will teach the use of the conjunction *and*: —

Two fat cows and one lean cow.
Four white dogs and three black cats.
Two small desks and six large benches.
Eight short pins and three long pins.

The following lesson may be made very useful in

introducing many new words, and will also bring in the habitual form of the verb : —

The baker bakes bread and pies.
The butcher kills cows and sheep.
The mason builds houses.
The joiner makes tables, chairs, benches, &c.
The hairdresser cuts hair.
The shoemaker makes shoes.
The miller grinds corn.
The fisherman catches fish.

This lesson may be carried through the trades which the pupil is likely to know. The present time of the verb *to have* may be introduced in the following manner. Let the teacher show to the pupil any object which he possesses, say, for instance, a watch, then let him write down —

Mr. ———— has a watch.
———— has a black coat.
———— has a knife.
———— has a pair of boots.
J. (*name of pupil*) has a jacket.
———— has black hair.
———— has blue eyes.
———— has a pair of shoes.

Let also the names of persons whom the pupil knows be written down, and let the pupil supply examples of what he knows them to have.

The personal pronouns may form the next step, with the verb *to have*. Write down —

Mr. ——— has a watch ; and then rub out the

Mr. and *has*, and write *I have*, pointing to yourself for I. Continue this through several examples, and then let the pupil write down what he possesses. Go through the other persons in a similar manner, pointing to the persons indicated. Such examples as the following will be found very useful as well as likely to interest the pupil : —

A cow has	a head.
	four legs.
	a long tail.
	a thick skin.
A lion has	a long mane.
	—— ——
	—— ——
	—— ——
A bird has	two legs.
	—— ——
	—— ——
	—— ——

Give a good number of such examples, letting the pupils supply the blanks. Questions such as, —What has two wings? Who has a watch? What has a long tail? — might now be put. The verb *to be* (to exist), present time, can be taught by such a lesson as the following : —

I	*am*	a	man.	
Thou	*art*	a	boy.	
He	*is*	a	little	man.
She	*is*	a	fat	girl.
It	*is*	a	long	desk.

We *are* men.
You *are* boys.
They *are* girls.

To illustrate the use of the pronouns, *I* must be shewn to have reference to the person writing; *thou*, to some one who is communicated with, and pointed to; *he* is signed by touching the chin and pointing; and *she* by touching the forehead and pointing. *We* is signed by bringing round the hand as pointing to many, and including yourself; and *you* by pointing round to many, but not including yourself. *They* is pointing to several, but at a distance, or not spoken with. Many examples must be given to illustrate the use of both *to have* and *to be*. Such exercises as the following are useful:—

John S —— is { industrious. / careful. / kind.

R. S —— is { fat. / idle. / sulky. / impudent. / careless.

John and James are little boys.
They are not strong.
They are not deaf.
They are active.
They are honest.
They are kind.

Sugar and treacle are sweet.
They are brown.
They are not bitter.
They are nice.
Brass and Gold are yellow.
They are heavy.
They are malleable.
They are useful.
&c., &c., &c.

Such examples as these ought to be continued to a considerable number, as they are calculated to bring before the pupil a great variety of words which will be useful in extending his vocabulary. This form, with those also given of the verb *to have*, and the application of the forms of the simple habitual, as, "The shoemaker makes shoes," "the horse draws carts, ploughs, waggons, &c.," will give the teacher the means of varying the forms of his lesson. Let him also introduce, when it is convenient, the use of the conjunction and numbers. By these means he will have the power of introducing the names of objects, and their qualities and simple actions.

Having carried our hints so far, we feel that to advance further would require our remarks to be made so much more in detail, and our illustrations to be so numerous, that they would not be suited to the limits of a small volume. Our observations, moreover, are not made with the view of fitting a person to become a teacher of Deaf-mutes, but to guide those who may for a short time have the opportunity

of being useful to them before entering an Institution. After the age of eight or nine it is most desirable that a child should be placed under a competent instructor ; one who has made the subject his peculiar study. Under such a person only is it to be expected that a child can be effectually educated. Nor is it to be wondered at if even under such circumstances, with all the aids that experience, ingenuity, and patience can afford, the progress of a Deaf-mute's instruction, incumbered as it is with difficulties, is slow and uncertain — and that the results prove, in this instance, as in every other, that the perfection of nature is not to be reached by even the most elaborate efforts of art.

NOTE A.

The following observations on the cures of Deafness are extracted from a letter which appeared in the *Glasgow Herald*, written by Mr. Baker, of the Doncaster Institution, and presents a very complete summary of all that is of interest on the subject : — "My experience among the Deaf and Dumb has extended over fifteen years ; and during the whole of that time I have inquired much into the physical means employed to restore hearing. I have heard of some instances of partial success in cases of acquired Deafness ; but I have heard but of one single instance in which a totally deaf person was restored to hearing, and this was at Brussels, fifteen or sixteen years ago. This case I only know of by report, and have never seen it recorded. Hundreds of attempted cures have been made known to me. Professional men of high characters and attainments have devoted themselves to the subject, but in all cases they have ultimately despaired of success, and have left the practice ; and the ground, thus deserted by regular practitioners, under the impression that nothing satisfactory could be achieved, has been most profitably occupied by empirics and ignorant pretenders.

"But, although I have not been so fortunate as to meet with any cases in which hearing has been restored to the totally deaf, I would by no means have it inferred that it is impossible or impracticable. I shall state cases of restoration which deserve consideration — all, indeed, on which reliance can be placed, together with any evidence that can

be adduced to warrant such reliance. And in thus fairly stating all that have been recorded, I trust it will be considered that there is no wish on my part to conceal any fact which offers ground for hope that relief may be offered. An article which appeared in Silliman's American Journal, in 1836, supplies abundant information on this subject; and from this article I shall extract most of my facts. They are all mentioned by Itard — '*Traité des Maladies de l' Oreille et de l' Audition.* Paris, 1821.'

"Two hundred years ago, it was a general opinion that dumbness was caused by some organic defect in the organs of speech. It is now well known that the Deaf have the power of producing vocal sounds, and, indeed, of speaking and reading, and that these persons are dumb only because they are deaf. When this was first ascertained, it was natural that every method should be resorted to that science or medicine offered, to accomplish their restoration to hearing; for, possessing this faculty, language would soon be acquired, and they would be at once restored to the society of their fellow-men. Many distinguished physicians have, in different plans, directed their skill and science to various modes of curing or relieving Deafness. Amongst these, the much-lamented Sir Astley Cooper and Mr. Cleland, in England; Drs. Itard and Deleau, in France; Hendriskz and Guyot, in Holland; and Hymly in Germany; may be mentioned as having taken extraordinary pains to ensure success in the means they devised and adopted. The first object with these practitioners was to endeavour to ascertain the *causes* of Deafness by *post mortem* examinations. Here a difficulty presented itself; and it may be imagined that several years must have passed before a sufficient number of such examinations could take place to warrant any definite conclusions. Dr. Itard, of Paris, perhaps, accomplished more on this particular point than any other practitioner. His opinion was, that Deafness, when so total as

to occasion Dumbness, was invariably the consequence of paralysis of the auditory nerve. Farther observation, however, enabled him to discover, in some cases, palpable causes for this defect. In two cases he found chalky concretions in the cavity of the tympanum; in two others he found fungous excrescences. The fifth case presented a mass of gelatinous matter, which filled the cavity of the tympanum and the auditory passage. In another, who died of malignant fever, the auditory nerve was of no greater consistence than mucus. Itard has recorded, in his Treatise on the Maladies of the Ear, all the cases of cure previous to the time of himself and his contemporaries: these are few, and well worthy of being known. Amatus, of Portugal, informs us of a child who was dumb till twelve years of age, who, at the end of that time, began to talk easily and plainly. He says the cure was owing to a seton which was applied to the back of her neck, which dried up certain feculent humours with which the head was filled. He makes no mention of Deafness, but it is impossible to attribute her Dumbness to any other cause. Besides, he relates this fact in connection with the cure of a case of acquired Deafness. Desgrands Prés, a physician of Grenoble, communicated to Lazarus Rivière another case. A wandering beggar arrived by night at Pousenac, with his sick Deaf and Dumb child, who was suffering from fever. For several days they were charitably provided for; at length the father, thinking the child would die, abandoned him and left the place. The patient was, however, cured, and on his recovery was employed to take care of some sheep. Some years after he received a blow on the occiput, which fractured it, but, under the care of an able surgeon, it was healed, and, as the cure advanced, the sense of hearing recovered its functions; the man began to mutter a few words, and in time he was able to hear and speak distinctly. This power he retained to the end of his life.

The third case recorded by Itard is more generally known ; it is of a young man who had been born Deaf and Dumb, the son of a labourer at Chartres. At the age of 21 he suddenly began to speak, to the great astonishment of all who knew him. It was ascertained from him that three or four months previously he had heard the sound of the bells, to his great surprise, for this was to him a new sensation. Subsequently a watery discharge had taken place in his left ear, after which he heard perfectly with both. For three or four months he listened without speaking, and he spent this time in repeating to himself the words which he heard, and in becoming acquainted with words and the ideas attached to them. Then, believing himself sufficiently acquainted with language, he broke silence, though his speech was for some time imperfect.

M. Varroine, a French physician, mentions an instance in which the application of the *moxa* was successful. (This is a lanuginous or cottony substance, which is burnt slowly in contact with the skin, for the purpose of producing cauterisation.)—The patient was a young lady of Malaga, who was born Deaf, and was then twenty years of age. The tongue of the patient appeared to M. Varroine a little thicker than usual, and, as he regarded the case as presenting a simultaneous paralysis of the ear and tongue, he applied two moxas — one on the back of the neck, and the other under the chin, as near as possible to the root of the tongue. Each of the moxas was about the diameter of a crown, and produced a considerable inflammation in about seven days. There was a large swelling on the anterior part of the neck, which extended down to the breasts : it was accompanied with a violent fever of 24 hours, and ended in a copious perspiration. On the twelfth or fourteenth day the scabs fell off, and their loss was followed by considerable suppuration. The operator remarks that at this period the tongue was free in its movements, and dimi-

nished in thickness. In a little more than two months after the application of the moxas, the young lady began to hear the ringing of bells. Her hearing continued to improve, and in a short time her Deafness was completely dissipated. She afterwards began to articulate words. Dr. Itard remarks on this case, very justly, that the operator probably deceived himself as to there being paralysis of the tongue, as this never causes total Dumbness. The cure of the Deafness was sufficient to call forth the functions of the vocal organs.

In the year 1786, a Botanical physician, as he styled himself, named Felix Merle, commenced a course of treatment for Deafness on all the pupils in the Institution for the Deaf and Dumb at Bordeaux : the number amounted to twenty-six or twenty-seven. His treatment consisted in introducing, morning and evening, into each ear, a drop of a certain liquid, which was kept there by a bit of cotton. This treatment was continued for a month, and had no effect but in two instances. The first was the case of a boy, eight or nine years of age, who had become Deaf when young, but who yet heard a little with one ear. After the treatment had been continued twenty-three or twenty-four days, he experienced great pain in both ears, and the introduction of the liquid became insupportable. Some days after, a purulent discharge took place from both ears, the child began to hear more distinctly, and, though not perfectly, he learned to speak and to make use of language, which power he has since retained, though he has never heard nor spoken so well as other persons.

The second case in which the treatment of Merle was successful was of a girl sixteen years of age, who was born with the sense of hearing quite perfect, and who began to talk at fifteen or sixteen months old. This child caught cold, from being placed on the grass in a vineyard where her mother was employed. She experienced similar sensa-

tions, on the application of the liquid, to those of the boy already spoken of, and about the same time after the treatment had commenced. On the twenty-eighth day she felt an inclination to sneeze, which was followed by a copious discharge of purulent matter from both ears. Soon after perfect hearing was re-established, and she learned to speak rapidly.

These are all the well-authenticated instances previous to more recent efforts. Of the six cases, one was spontaneous, and five were produced by extreme irritation of certain parts.

The two extraordinary cures effected at Bordeaux attracted the attention of Itard, and he endeavoured to ascertain the composition of the liquid employed. The Professor refused to disclose the secret. He, however, sent Itard a small quantity, which was tried on three Deaf and Dumb persons without any result. He offered to purchase the secret, but was refused, on the ground that the government only could afford a sufficient recompense. On the death of the inventor, however, his wife communicated the remedy to Dr. Itard, which is here given : —

R. Pulverised Asarabacca..... Two Drachms.
Rose Leaves..... One Pinch.
Horse Radish..... One Drachm.
Parsley Pert..... One Pinch.
White Wine..... .....Eight Ounces.

Boil to one-half, strain, and add Sea Salt, two drachms. Several of these ingredients had at that time a reputation of utility in cases of Deafness, and the liquid was tried on all the pupils in the Paris Institution who had lost the power of hearing in infancy. The hopes that had been formed were, however, wholly frustrated, since none of the effects which had followed the treatment at Bordeaux took place. Subsequently it was employed in a number of other cases, but with the same lack of success, with one slight exception.

M. Itard applied the moxa to nine or ten pupils in the Institution at Paris. He states that several of the pupils in that Institution had formerly been subjected to the same treatment, but in all cases without success. He then employed the actual cautery, a remedy similar to the moxa, and it was attended with better results. The patient was a child of four and a half years, with a good constitution, and in perfect health, but quite destitute of hearing and speech. The cautery was applied on each of the mastoid processes, with an iron heated white; it was followed by abundant suppuration, and an eruption of purulent matter. Signs of hearing were shortly afterwards observed, and, as this power increased, the child began to repeat a few words, though it was necessary to pronounce them with a very elevated voice. Eighteen months after, the child pronounced words with tolerable distinctness, but his deafness was not wholly removed. The result of this treatment was enough to inspire hope, and it was employed in three other cases of congenital deafness, but without the slightest success.

M. Itard still persevered in spite of continued failures; he employed a new experiment in his next case, a child of three or four years old, whose Deafness was attributed to convulsions at the time of dentition. This new treatment consisted chiefly in the application of blisters. It was successful, but in forty other cases in which it was afterwards employed no similar success followed.

The next course of experiments to which the Deaf and Dumb were subjected, on the failure of the stimulating means which have been detailed, had for their object the removal of those material causes in the ear which prevent or obstruct the admission or circulation of sound. The two principal operations to effect this were *perforation of the Tympanum and injection of the Eustachian Tube.* If this tube be obstructed, so that no air can pass through it into

the Tympanum, or if the Tympanum itself be filled with mucus, or any other material substance, or if its membrane become ossified, or so thick that it cannot communicate the vibrations of sound, the hearing will inevitably be destroyed. Such accidents often occur, and are a frequent source of total Deafness.

Sir Astley Cooper, in the year 1800, performed the operation of perforating the Tympanum on many Deaf persons. His success for a time appeared promising, and the same operation was immediately practised in France and Germany. Not only simple perforation of the Tympanum, but the removal of a portion of the membrane, with an instrument shaped like a punch, was practised in some instances; but no efforts could prevent the aperture from closing and becoming healed. Hymly, a German physician, performed this operation four times on one individual without being able to preserve the opening. Itard endeavoured to modify this system of practice, and certainly improved it, but he acknowledges that his success was completely temporary, and he renounced this operation as a method of cure. It was, however, taken up by M. Deleau: he contrived an instrument of more complicated structure than any that had been hitherto employed, which would render impossible the obliteration of the aperture; and he published, in 1822, a memoir on the results of twenty-five of his experiments. A reviewer of the pamphlet says, "In reading this essay it is difficult to avoid the conviction, notwithstanding the constant effort he makes to show the remarkable success he has met with, that, even if truly related, it is scarcely worth mentioning. In some cases, to his great disappointment, the aperture closes; in others, a promising subject, when just about to demonstrate the complete success of his operation, is afflicted with a cold, or some form of disease, and again plunged into his original state of Deafness; sometimes the parents are perverse enough to deny that the

hearing of their children is improved, and sometimes the children hear well enough, but utterly refuse to talk! To judge from the cases before us, he seems to have succeeded in every thing except restoring his patients to the full and permanent use of the sense of hearing. In this it is perfectly evident that he met with no success. He has not recorded a single instance in which a patient was so far restored to hearing as actually to have acquired the use of language.' He has abandoned the use of his instrument, and in his latter writings scarcely makes mention of the operation, which is conclusive as to his opinion respecting it.

At the Institution at Gronigen, in Holland, the operation was performed on eighty-one individuals. Of these only seventeen had their hearing in the least improved, and of these *fourteen* relapsed into their original state of Deafness in less than nine months. The remaining *three* preserved theirs, but not to such an extent as to be of any use to them in the acquisition of language.

All late writers on Deafness unite in condemning the perforation of the membrane of the tympanum; among these may be mentioned Dr. Wright, the author of one of the most practical works on Deafness that has yet appeared, Professor Dubois, M. Richerand, M. Saissy, M. Berjaud, and M. Itard.

A new mode of operation was devised by Itard, with some promise of success. Having found in two Mutes, who died within a few months of each other, chalky concretions in one, and mucus concretion in the other, obstructing the internal ear, he injected the cavity of the tympanum, through the membrane to expel the concretions, through the Eustachian tube. The first Deaf and Dumb boy on which he operated was of that small number who owe their defect to this cause. He was 12 years of age, and Deaf from birth. His power of hearing was established, and, had he lived,

he would probably have acquired the use of speech; but he was attacked with a disease which baffled skill, and died a few months after the operation. Itard was encouraged to repeat his experiment on twelve other Deaf-mutes, but no further evidence of its utility appeared, and he abandoned it in despair.

Attention was next directed to the injection of the Eustachian tube, in order to allow of a free admission of air into the cavity of the tympanum. This injection was performed through the mouth, the instrument being applied to the extremity of the passage to be injected. The idea was abandoned for some time, from a distrust of its efficacy, though in one case it had been found useful. An English surgeon, Mr. Cleland, suggested an improvement in the instrument, and that it should be directed by the Eustachian tube *through the nose*. The operation was performed by a great number of individuals, both here and abroad, but it was considered to have demonstrated nothing more than the practicability of injecting the Eustachion tube. Deleau undertook a new series of experiments, and satisfied *himself*, but only himself, that the Deaf might be made to hear, and the Dumb to speak. The case on which he claims his greatest credit is the well-known one of Claude Honoré Frézel. The details of this case form the subject of one of Deleau's pamphlets. It is enough, perhaps, to say, that, at the end of six years after the operation, he "had learned to talk and to read juvenile books." Itard and Berjaud are of opinion, and in this opinion all intelligent persons of experience among the Deaf and Dumb coincide, that this alleged cure was simply a successful instance of instruction in artificial articulation. The hearing might have been slightly improved, and this would facilitate the acquisition of speech. Dr. Itard was employed by the Paris Institution, in consequence of the partial success of Deleau, to report on the various remedies employed in the physical treatment of the

Deaf; and, in consequence of his report, it was decided that a certain number of the pupils should be subjected to medical treatment. He made a thorough experiment on the utility of injecting the Eustachian tube, and performed the operation in one hundred and twenty cases, the results of which were, to use his own language, "just nothing, with regard to hearing, in the great majority of the Mutes, and in the rest temporary and of little advantage."

It is now universally believed, among those who have given the most impartial and disinterested attention to the subject, that there is nothing sufficiently encouraging in all that has been done to warrant the conclusion that Deafness can be removed, though it may be alleviated in some cases in a slight degree; and that the very few instances of its removal must be regarded as isolated exceptions which do not destroy the general principle.

NOTE B.

An interesting paper was read before the New York Lyceum of Natural History, by Dr. Akerly, in which a comparison is made between signs in use amongst certain tribes of North American Indians, and signs used by the Deaf and Dumb. The following is an extract taken from Dr. Orpen's "Contrast," where a more lengthened account is to be found of Dr. Akerly's paper: —

"If we examine the signs employed by the Indians, it will be found that some are peculiar, and arise from their savage customs, and are not so universal as sign language in general; but others are natural, and universally applicable, and are the same as those employed in the Schools for the Deaf and Dumb, after the method of the celebrated Abbé Sicard.

"In comparing a few of these signs, it will be seen wherein they agree. Among them is found the sign for *truth*.

"*Truth*, in spoken language, is a representation of the real state of things, or an exactness in words, conformable to reality.

"In the language of signs, *truth* is represented by words passing from the mouth, in a straight line, without deviation. This is natural and universal; it is the same as was adopted by the Abbé Sicard, and is used in the Schools for the Deaf and Dumb in the United States. It is thus described in Major Long's Expedition, as practised by the Indians:—

"'*Truth*.—The fore finger passed, in the attitude of point-

ing, from the mouth forward, in a line curving a litle upward, the other fingers being carefully closed.'

"A *lie*, on the other hand, is a departure from rectitude—a deviation from that straight course which inculcates truth. The Indians represent a lie by the following signs:—

"'*Lie.*—The fore and middle fingers extended, passed two or three times from the mouth forward; they are joined at the mouth, but separate as they depart from it, indicating that the words go in different directions.'

"This sign is true to nature, and radically correct, though in the instruction of Deaf-mutes, we simplify the sign, by the fore finger passed from the mouth, obliquely or sidewise, indicating a departure from the direct course.

"'*House or Lodge.*—The two hands are reared together, in the form of the roof of a house, the ends of the fingers upwards.'

"This sign is true and natural, though we add to it by placing the ends of the fingers on each other, before they are elevated in the position of the roof, to indicate the stories of which a house, in civilized life, is composed.

"*Entering a House or Lodge.*—The left hand is held with the back upward, and the right hand also, with the back up, is passed in a curvilinear direction, down under the other, so as to rub against its palm, then up on the other side of it. The left hand here represents the low door of the skin lodge, and the right, the man stooping down to pass in it.

"This sign, though peculiar, is natural as respects the mode of living of the Indians, but is not universally applicable. It corresponds with the sign for the preposition *under*."

The sign for an object discovered, as distinguished from the simple act of seeing, is made by the aborigines with much nicety and precision, and may, with propriety, be adopted in a universal language.

"'*Seeing.*— The fore finger, in the attitude of pointing, is passed from the eye towards the real or imaginary object.

"'*Seen or discovered.*—The sign of a man, or other animal, is made, after which the finger is pointed towards, and approaching to your own eye: it is the preceding sign reversed.'

"The Indian sign for a *man* is a finger held vertically, which differs from the Deaf and Dumb sign. Their sign for a *bison* is the same as the Deaf and Dumb sign for a cow, viz.:—

"'The two fore fingers are placed near the ears, projecting so as to represent the horns of the animal.'

"Now, when a party of Indians are out on a hunting or warlike expedition, they may *discover* a man, the scout of a hostile party, or an herd of buffaloes. The sign for *discovery*, in such a case, will be different from that of the simple act of seeing.

"In general, we cast our eyes upon an object with indifference, and, in seeing, simply distinguish a man from an animal, a tree from a shrub, a house from a barn; or we determine the relative shape, size, or distance of an object. This is done by the *coup d'œil;* and therefore the act of seeing, in the universal language of signs, is to direct the finger from the eyes to the object.

"But when we discover an object, we look and look again; and then, in the true natural language of signs, it comes to our eyes, as the Indians have correctly represented it, because we have repeatedly directed the eyes to the spot where the discovery is made, and not seeing it the first, second, or third time, the object clearly comes to our eyes, and hence the distinction between sight and discovery is founded in the universality of sign language.

"The signs for *eating*, *drinking*, and *sleeping* are naturally and universally the same, and cannot be mistaken. They are thus described in the account of the Expedition:—

"'*Eating.*—The fingers and thumbs are brought together,

in opposition to each other, and passed to and from the mouth, four or five times, within the distance of three or four inches from it, to imitate the action of food passing to the mouth.'

"'*Drinking, or water.*—The hand is partially clenched, so as to have something of a cup-shape, and the opening between the thumb and finger is raised to the mouth, as in the act of drinking. If the idea of water is only to be conveyed, the hand does not stop at the mouth, but is continued above it.'

"'*Night, or Sleeping.*—The head, with the eyes closed, is laterally inclined for a moment upon the hand. As many times as this is repeated, so many nights are indicated. Very frequently the sign of the sun is traced over the heavens, from east to west, to indicate the lapse of a day, and precedes the motion.'"

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